southern
utah
wilderness
alliance

HAND DELIVERED

May 22, 2008

Daron Haddock
Permit Supervisor - Utah Division of Oil, Gas and Mining
1594 West North Temple
P.O. Box 145801
Salt Lake City, Utah 84114

Re: *Proposed Coal Hollow Mine, C/025/0005*
Southern Utah Wilderness Alliance et al. Comments and Objections

Greetings:

Southern Utah Wilderness Alliance appreciates the opportunity to share its concerns and objections regarding the Division of Oil, Gas, and Mining's ("DOGM" or "the Division") erroneous conclusions that Alton Coal Development's permit application package (PAP) is administratively complete. These comments are submitted on behalf of the Southern Utah Wilderness Alliance, the Southern Utah C.O.A.L.M.I.N.E. Coalition (SUCC), Natural Resources Defense Council, National Parks and Conservation Association, the Sierra Club, and their hundreds of thousands of members across the United States. For convenience, these groups are referred to collectively herein as "SUWA."

I. Comments Incorporated by Reference

SUWA incorporates the following comments and the issues raised therein by reference and will generally not discuss them further in this letter:

- Comments prepared by Elliott Lips regarding hydrology, geology and other technical aspects of the permit application (attached hereto as Exhibit 1);
- Comments prepared by Megan Williams regarding air quality (attached hereto as Exhibit 2);
- Comments prepared by Dr. Michele Haefele regarding socio-economics (attached hereto as Exhibit 3);

- Comments submitted by Donna Owens, District Ranger, Powell Ranger District, Dixie National Forest to Mary Ann Wright on May 13, 2008 (attached hereto as Exhibit 4)

- Comments submitted by Carmen Bailey, Utah Division of Wildlife Resources to Pamela Grubaugh-Littig on October 30, 2007 (attached hereto as Exhibit 5);

- Comments submitted by Larry Svoboda, Director, NEPA Program, Environmental Protection Agency to Keith Rigtrup, Bureau of Land Management on March 9, 2007 (attached hereto as Exhibit 6);

- Comments submitted by Eddie Lopez, Superintendent, Bryce Canyon National Park to Keith Rigtrup, Bureau of Land Management on February 23, 2007 (attached hereto as Exhibit 7); and

- Comments submitted by Stephen Bloch, Southern Utah Wilderness Alliance to Keith Rigtrup, Bureau of Land Management on February 26, 2007 (attached hereto as Exhibit 8).

Several of these comments letters were sent to the Bureau of Land Management's Kanab field office as part of that office's preparation of an environmental impact statement for Alton Coal's Federal Coal Lease Application. Many of the issues raised by these various federal and state agencies, however, pertain directly to the instant permit application before the Division and must be considered and evaluated. As explained in more detail below, though many of the federal and state comments address off-site effects and impacts, the Division is required to analyze impacts to the "adjacent area." Utah Admin. R645-100-200.

II Adjacent Area

The Utah Coal Rules are clear that in addition to considering the impacts of coal mining and reclamation operations to the permit area, the Division must give equal and full treatment to the "adjacent area": – "the area outside the permit area where a resource or resources, determined according to the context in which adjacent area is used, are or reasonably could be expected to be adversely impacted by proposed coal mining and reclamation operations." Utah Admin. R645-100-200. In its current iteration, the Permit Application wholly fails to consider or often fails to even mention project impacts to the adjacent area in the following sections, though it must do so: cultural and historic resources information, (R645-301-411.140); environmental description, including socio-economics of the adjacent area (R645-301-411.130); biology (R645-301-300); and hydrology (R645-301-700). These deficiencies require that the Division reverse its earlier decision that the Permit Application is administratively complete.

III. Cultural and Historic Resources Information

The Division has failed to comply with the requirements of Utah Code Ann. § 9-8-404 and the National Historic Preservation Act (NHPA), 16 U.S.C. §§ 470 *et seq.*, as required by Utah Admin. R645-300-113 and R645-301-411.

- As noted immediately above, the Permit Application is grossly lacking in any information regarding the potential adverse impacts from coal mining operations to "cultural and historic resources listed or eligible for listing in the National Register of Historic Places and known archaeological sites within the permit and adjacent areas." Utah Admin. R645-411.140 (emphasis added).

- Utah Code Ann. § 9-8-404(1)(a) reinforces the Division's obligation to look beyond the immediate footprint of the permit area: [b]efore . . . approving any undertaking, each agency shall take into account the effect of the . . . undertaking on any historic property." The term "effect" is understood in this context to include direct effects, indirect effects, and cumulative impacts. *See, e.g.*, 36 C.F.R. § 800.4; Utah Admin. R645-300-133.600.

- The heart of the NHPA is Section 106, which prohibits agencies from approving any "undertaking," including the issuance of any license, permit, or approval unless the agency takes into account the effects of the undertaking on historic properties that are include in or eligible for inclusion in the National Register of Historic Places. 16 U.S.C. §§ 470(f) and 470(w)(7). The NHPA's implementing regulations, 36 C.F.R. Part 800, detail the process for full compliance with Section 106. The participants in the Section 106 process include, but are not limited to, the State Historic Preservation Officer (SHPO), Indian tribes, local governments, additional consulting parties, and the public. 36 C.F.R. § 800.2. SUWA has contemporaneously submitted with these comments a request to the Division that SUWA be granted "consulting party" status, pursuant to 36 C.F.R. § 800.2(c)(5).

- Because the Division has not complied with either Utah Code Ann. § 9-8-404 or Section 106, the Permit Application contains inadequate information regarding the cultural and historic resources listed or eligible for listing in the National Register of Historic Places within the permit and adjacent areas. Utah Admin. R645-301-411. The Permit Application also contains insufficient information regarding the "effect" of the proposed Coal Hollow mine to historic properties and cultural resources.

- SUWA directs the Division's attention in particular to the recently designated Panguitch Historic District which is listed in the National Register of Historic Places. SUWA believes it is virtually certain that the Panguitch Historic District will be adversely impacted and affected by the coal mining operations proposed in the Permit Application. *See* 36 C.F.R. § 800.5 Though the SHPO's office has recently brought this issue to the Division's attention, the Permit Application and draft Cultural Resource Management

Plan (CRMP) contains no information and analysis about either the resource at risk or ways to potentially mitigate these impacts.

- The Division's May 9, 2008 deficiency letter to Alton Coal regarding the draft CRMP confirms SUWA's contention that the Permit Application is far from administratively complete. For example, the Division states that the draft CRMP is missing such basic information that it has not yet "initiate[d] consultation with the State Historic Preservation Office." *See* Letter from Daron Haddock, Division to Chris McCourt, Alton Coal Development (May 8, 2008) (# 0015, Outgoing File, 2008).

IV. Kane County Road 136.

The proposed realignment of Kane County Road 136 fits within the definition of "surface coal mining operations" and thus must be included within the permit area under the Surface Mining Control and Reclamation Act and Utah Coal Mining and Reclamation Act. *See* Utah Admin. R645-301-527.

V. Fish and Wildlife Resource Information.

The "fish and wildlife resource information" described in the Permit Application is inadequate and does not comply with the requirements of Utah Admin. R645-301-322 and R645-301-130. For example, there is no indication that this information takes into account the full and accurate meaning of the term "adjacent area;" all data and communications focused exclusively on the footprint of the permit area.

- For example, the permit application states that sensitive plant surveys were conducted in August 2006 and September 2007 for sensitive plant species – though there is no indication what species were being searched for or whether they could be located this late in the year. The list of species being searched for is alleged to be "on file" with Mt. Nebo Scientific, Inc. *See* Appendix 3-4 at 5.

VI. Request for Informal Conference

Pursuant to Utah Admin. R645-300-123, SUWA timely requests an informal conference on the Division's March 19, 2008 Notification of Determination of Administrative Completeness for Coal Hollow Permit Application. SUWA requests that the informal conference be held at the Division's Salt Lake City office. *See* Utah Admin. R645-300-123.120. As set forth above, the Division's decision that Alton Coal's permit application is administratively complete is erroneous. SUWA's comments and exhibits serve to "briefly summarize the issues" that SUWA intends to raise at the informal conference. Utah Admin. R645-300-123.110.[1] SUWA looks

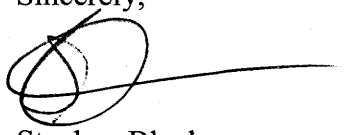
[1] SUWA may also supply the Division with exhibits during the informal conference that will assist the Division and Alton Coal in understanding our concerns. SUWA may also raise issues not discussed in this comment letter if such issues arise between now and then.

forward to participating in the requested informal conference. Please contact the undersigned directly to arrange the time and date for the informal conference.

Thank you for your time and consideration in evaluating these concerns and objections. SUWA is confident that after the Division reviews the information detailed above and discussed at the Informal Conference, it will conclude that the PAP is not administratively complete.

Feel free to contact me with any questions: (801) 486-3161.

Sincerely,



Stephen Bloch
Staff Attorney

EXHIBIT 1

SOUTHERN UTAH WILDERNESS ALLIANCE *ET AL.*

COMMENTS AND OBJECTIONS RE: PROPOSED COAL HOLLOW MINE, C/025/0005

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MEMORANDUM

TO: Steve Bloch, SUWA

FROM: Elliott Lips

DATE: May 19, 2008

RE: Completeness Review of the Coal Hollow Mine Permit Application Package

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I have conducted a review of the Permit Application Package (PAP) submitted to DOGM for the Coal Hollow Mine and have prepared comments addressing areas where the PAP is not complete. These comments were prepared by me under contract with the Southern Utah Wilderness Alliance. A copy of my curriculum vitae is attached to this memorandum as Exhibit 1.

My comments below focus on areas where the PAP is missing essential information that is specifically required by the coal rules (R645-301 and R645-302). I have limited the scope of my comments to administrative completeness issues. Because the PAP is currently not complete, it would be premature to comment on technical adequacy issues until the completeness issues are resolved. Once the PAP is complete, it will be possible to conduct a review of its technical adequacy.

In conducting my review, I have been guided by Rule 645-301.150 Completeness, which states "An application for a permit to conduct coal mining and reclamation operations will be complete and will include at a minimum information required under R645-301 and, if applicable, R645-302."

1) **Hydrology Information for the Adjacent Area**. The PAP is not complete because it does not contain the required information for the hydrologic resources within the adjacent area.

   - According to R645-100-200 ""Adjacent Area" means the area outside the permit area where a resource or resources, determined according to the context in which adjacent area is used, are or reasonably could be expected to be adversely impacted by proposed coal mining and reclamation operations, including probable impacts from underground workings."

- Adverse impacts to water resources in the adjacent areas include coal dust impacts on surface water quality. These exact impacts have been reported along Salina Creek where layers of coal dust have been documented entering the creek when the SUFCO mine began heavy hauling of coal (DWR, 2/23/07) (attached as Exhibit 2).
- The DOGM received a copy of letter from the Utah Division of Wildlife Resources to the Office of the Governor, where concern over this issue was expressed (DWR, 2/23/07). In addition, I have attached a copy of a letter from the Office of the Governor to the BLM where the concern was again raised (PPLC, 3/1/07) (attached as Exhibit 3).
- Because it is reasonable to expect adverse impacts to surface water resources from coal dust as a result of the hauling of the coal, the PAP must include the following information for the entire adjacent area between the mine and the rail loading facility:
    - Descriptions of the existing hydrologic resources (721)
    - Locations of surface water bodies (722.200)
    - Baseline surface water information (724.200)
    - Geologic information sufficient to determine the probable hydrologic consequences (PHC) (724.310)
    - Compliance with R645-302-320 (724.700)
    - Determination of the PHC (728)
    - Plan to minimize disturbance to the hydrologic balance (731)

2) **Cross Sections and Maps**. The PAP is not complete because it does not contain the required cross sections and maps.

> *Rule 722.100. Location and extent of subsurface water, if encountered, within the proposed permit or adjacent areas. For UNDERGROUND COAL MINING AND RECLAMATION ACTIVITIES, location and extent will include, but not limited to areal and vertical distribution of aquifers, and portrayal of seasonal differences of head in different aquifers on cross-sections and contour maps.*

- The PAP does not contain cross-sections or contour maps that portray the seasonal difference in head in the alluvial aquifers in the permit and adjacent areas. Figure 7-13 is reported to be a map showing potentiometric levels in alluvial ground water systems; however, it does not show seasonal differences in head, and it contains the following note "Hydraulic head contours are approximate and are not necessarily representative of conditions in a continuous saturated aquifer. Contours are intended for evaluating local saturated levels in the alluvial sediments and likely do not represent a potentiometric surface."
- The PAP dos not contain any cross-sections or contour maps that portray the seasonal difference in head for any aquifers in the Dakota Formation. In fact no such maps or cross sections are even possible because there are no water monitoring wells in this formation below the coal seam to be mined (see #3 below)

3) **Baseline Ground Water Information.** The PAP is not complete because it does not contain the required baseline ground water information.

> *Rule 724.100. Ground Water Information. The location and ownership for the permit and adjacent areas of existing wells, springs and other ground-water resources, seasonal quality and quantity of ground water, and usage. Water quality descriptions will include, at a minimum, total dissolved solids or specific conductance corrected to 25 degrees C, pH, total iron and total manganese. Ground-water quantity descriptions will include, at a minimum, approximate rates of discharge or usage and depth to the water in the coal seam, and each water-bearing stratum above and potentially impacted stratum below the coal seam.*

- The coal seam to be mined is Smirl coal zone which is in the Dakota Formation near the upper formation contact with the overlying Tropic Shale (PAP, 6-7). The PAP (7-3) documents that there are at least three seeps and springs that discharge from the Dakota Formation immediately south of the permit area. Mining activities will remove the Tropic Shale and the Smirl coal seam exposing the underlying Dakota Formation and potentially impacting the water-bearing stratum contained within this formation. Table 5 of Appendix 7-1 clearly shows that **none** of the water monitoring wells installed in the permit and adjacent area extends into the Dakota Formation below the Smirl coal seam. Thus there is no information on the ground water quality or ground water quantity for the potentially impacted water-bearing stratum below the coal seam.
- The PAP (Drawing 7-2) identifies 5 springs, and 9 drill holes (wells) as baseline ground water monitoring locations in the permit and adjacent area. A review of the DOGM electronic data base (http://www.ogm.utah.gov/coal/edi/wqdb.htm) on May 17, 2008 revealed that **none** of these ground water monitoring sites contained information on seasonal quality and quantity of ground water. For all sites, data are missing for one or more seasons, and/or the data have not been collected for two years as per DOGM Tech-004.

4) **Baseline Surface Water Information.** The PAP is not complete because it does not contain the required baseline surface water information.

> *724.200. Surface water information. The name, location, ownership and description of all surface-water bodies such as streams, lakes and impoundments, the location of any discharge into any surface-water body in the proposed permit and adjacent areas, and information on surface-water quality and quantity sufficient to demonstrate seasonal variation and water usage. Water quality descriptions will include, at a minimum, baseline information on total suspended solids, total dissolved solids or specific conductance corrected to 25 degrees C, pH, total iron and total manganese. Baseline acidity and alkalinity information will be provided if there is a potential for acid drainage from the proposed mining operation. Water*

quantity descriptions will include, at a minimum, baseline information on seasonal flow rates.

- The PAP (7-14) identifies 11 surface water baseline monitoring locations in the permit and adjacent area. A review of the DOGM electronic data base (http://www.ogm.utah.gov/coal/edi/wqdb.htm) on May 17, 2008 revealed that **none** of these water monitoring sites contained baseline information on surface-water quality and quantity sufficient to demonstrate seasonal variation and water usage, or baseline information on seasonal flow rates. For all sites, data are missing for one or more seasons, and/or the data have not been collected for two years as per DOGM Tech-004.

5) **Alluvial Valley Floor.** The PAP is not complete because there is no information in support of alluvial valley floor determinations for the valleys in the area adjacent to the permit area, and there is no information upon which a finding can be made that the proposed operation will not materially damage the quantity and quality of water in surface and underground water systems that support alluvial valley floors outside the permit area.

724.700. Each permit application that proposes to conduct coal mining and reclamation operations within a valley holding a stream or in a location where the permit area or adjacent area includes any stream will meet the requirements of R645-302-320.
R645-302-320. Alluvial Valley Floors. R645-302-320 applies to any person who conducts or intends to conduct coal mining and reclamation operations on areas or adjacent to areas designated as alluvial valley floors.
321. Alluvial Valley Floor Determination.
321.100. Before applying for a permit to conduct, or before conducting surface coal mining and reclamation operations within a valley holding a stream or in a location where the adjacent area includes any stream, the applicant shall either affirmatively demonstrate, based on available data, the presence of an alluvial valley floor, or submit to the Division the results of a field investigation of the proposed permit and adjacent area. The field investigations shall include sufficiently detailed geologic, hydrologic, land use, soils, and vegetation studies on areas required to be investigated by the Division, after consultation with the applicant, to enable the Division to make an evaluation regarding the existence of the probable alluvial valley floor in the proposed permit or adjacent area and to determine which areas, if any, require more detailed study in order to allow the Division to make a final determination regarding the existence of an alluvial valley floor.
323. Findings
323.100. No permit or permit change application for coal mining and reclamation operations in Utah will be approved by the Division unless the application demonstrates and the Division finds in writing, on the basis of information set forth in the application that:

323.120. The proposed operations would not materially damage the quantity and quality of water in surface and underground water systems that supply those alluvial valley floors or portions of alluvial valley floors which are:
323.122. Outside the permit area of an existing or proposed coal mining and reclamation operation;

- Mining activities will remove all naturally occurring geologic materials down to and including the Smirl coal seam in the Dakota Formation. This includes the alluvial material in Sink Valley and Lower Robinson Creek, both tributaries to Kanab Creek. There are numerous seeps, springs, and aquifers in the alluvial materials in the permit area. Flow of water into, through, and out of these materials will be affected by the mining operations. Because this water would naturally flow down gradient, it is reasonably to expect that down gradient alluvial aquifers and areas of discharge within the adjacent area would be adversely impacted (see Appendix 7-1, Figure 21).
- The PAP (Appendix 7-1, 7-4, and the Alluvial Valley Floor Supplement) present the results of information in support of an alluvial valley floor determination for Sink Valley in the permit area and the area immediately adjacent to the permit area. (Comments on the technical adequacy of this information are beyond the scope of this memo on completeness issues and will be addressed at a later date.)
- However, the PAP does not contain any information in support of alluvial valley floor determinations for Sink Valley south of the permit area, Lower Robinson Creek west of the permit area, or Kanab Creek west and south of the permit area. All of these valleys are in the adjacent area down gradient of the permit area (see definition of adjacent area in #1 above), have streams, and would potentially be designated as alluvial valley floors.
- Specifically, there have been no field investigations that include sufficiently detailed geologic, hydrologic, land use, soils, and vegetation information that would enable the Division to make a final determination regarding the existence of alluvial valley floors in these areas.
- According to R645-100-200 ""Materially Damage the Quantity or Quality of Water" means, with respect to ALLUVIAL VALLEY FLOORS, to degrade or reduce, by coal mining and reclamation operations, the water quantity or quality supplied to the alluvial valley floor to the extent that resulting changes would significantly decrease the capability of the alluvial valley floor to support agricultural activities."
- Without the determination of alluvial valley floors, the Division will be unable to make a finding that the proposed mining will not materially damage the quantity and quality of water that supply water to alluvial valley floors outside the permit area.

6) **Probable Hydrologic Consequences.** The PAP is not complete because it does not contain a PHC determination that is based on baseline hydrologic and geologic information collected for the permit application.

728. Probable Hydrologic Consequences (PHC) Determination.

728.100. The permit application will contain a determination of the PHC of the proposed coal mining and reclamation operation upon the quality and quantity of surface and ground water under seasonal flow conditions for the proposed permit and adjacent areas.
728.200. The PHC determination will be based on baseline hydrologic, geologic and other information collected for the permit application and may include data statistically representative of the site.
728.300. The PHC determination will include findings on:
728.310. Whether adverse impacts may occur to the hydrologic balance;
728.320. Whether acid-forming or toxic-forming materials are present that could result in the contamination of surface- or ground-water supplies;
728.330. What impact the proposed coal mining and reclamation operation will have on:
728.331. Sediment yield from the disturbed area;
728.332. Acidity, total suspended and dissolved solids and other important water quality parameters of local impact;
728.333. Flooding or streamflow alteration;
728.334. Ground-water and surface-water availability; and
728.335. Other characteristics as required by the Division; and
728.340. Whether the proposed SURFACE COAL MINING AND RECLAMATION ACTIVITY will proximately result in contamination, diminution or interruption of an underground or surface source of water within the proposed permit or adjacent areas which is used for domestic, agricultural, industrial or other legitimate purpose.

- As discussed in #3) above, there has been no baseline hydrologic information collected on the ground water quality or ground water quantity for the Dakota Formation below the Smirl coal seam, and none of the ground water monitoring sites contain the required information on seasonal quality and quantity of ground water. In addition, as discussed in #4) above, none of the surface water monitoring sites contained baseline information on surface-water quality and quantity sufficient to demonstrate seasonal variation and water usage, or baseline information on seasonal flow rates. Therefore, the PHC determination is not complete and there can be no complete findings on:
    - Whether adverse impacts may occur to the hydrologic balance (728.310),
    - Whether acid-forming or toxic-forming materials are present that could result in the contamination of surface- or ground-water supplies (728.320),
    - What impact the proposed coal mining and reclamation operation will have on acidity, total suspended and dissolved solids and other important water quality parameters of local impact (728.332); flooding or streamflow alteration (728.333); ground-water and surface-water availability (728.334), or
    - Whether the proposed surface coal mining and reclamation activity will proximately result in contamination, diminution or interruption of an underground or surface source of water within the proposed permit or adjacent areas which is used for domestic, agricultural, industrial or other legitimate purpose (728.340).

7) **Operation Plan – General Requirements.** The PAP does not contain an operation plan that is specific to the local hydrologic conditions or that can specifically address any potential adverse hydrologic consequences that would have been identified in a complete PHC determination.

> *730. Operation Plan.*
> *731. General Requirements. The permit application will include a plan, with maps and descriptions, indicating how the relevant requirements of R645-301-730, R645-301-740, R645-301-750 and R645-301-760 will be met. The plan will be specific to the local hydrologic conditions. It will contain the steps to be taken during coal mining and reclamation operations through bond release to minimize disturbance to the hydrologic balance within the permit and adjacent areas; to prevent material damage outside the permit area; to support approved postmining land use in accordance with the terms and conditions of the approved permit and performance standards of R645-301-750; to comply with the Clean Water Act (33 U.S.C. 1251 et seq.); and to meet applicable federal and Utah water quality laws and regulations. The plan will include the measures to be taken to: avoid acid or toxic drainage; prevent to the extent possible using the best technology currently available, additional contributions of suspended solids to streamflow; provide water treatment facilities when needed; and control drainage. For the purposes of SURFACE COAL MINING AND RECLAMATION ACTIVITIES the plan will include measures to be taken to protect or replace water rights and restore approximate premining recharge capacity. The plan will specifically address any potential adverse hydrologic consequences identified in the PHC determination prepared under R645-301-728 and will include preventative and remedial measures.*

- As discussed above, the PAP does not contain the required baseline information on ground-water quality and quantity or the required baseline information on surface-water quality and quantity. As such, the PHC determination is not complete. Without this information, the operation plan is necessarily incomplete because it is not specific to the local hydrologic conditions, and cannot specifically address potential adverse hydrologic consequences that should have been identified in the PHC determination.

8) **Water Monitoring.** The PAP is not complete because the water monitoring plan has not been based on the analysis of complete baseline hydrologic information and the required PHC determination.

> *731.211. The permit application will include a ground-water monitoring plan based upon the PHC determination required under R645-301-728 and the analysis of all baseline hydrologic, geologic and other information in the permit application. The plan will provide for the monitoring of parameters that relate to the suitability of the ground water for current and approved postmining land uses and to the objectives for protection of the hydrologic*

balance set forth in R645-301-731. It will identify the quantity and quality parameters to be monitored, sampling frequency and site locations. It will describe how these data may be used to determine the impacts of the operation upon the hydrologic balance. At a minimum, total dissolved solids or specific conductance corrected to 25 degrees C, pH, total iron, total manganese and water levels will be monitored;
731.221. The permit application will include a surface-water monitoring plan based upon the PHC determination required under R645-301-728 and the analysis of all baseline hydrologic, geologic and other information in the permit application. The plan will provide for the monitoring of parameters that relate to the suitability of the surface water for current and approved postmining land uses and to the objectives for protection of the hydrologic balance as set forth in R645-301-731 as well as the effluent limitations found in R645-301-751;
731.222. The plan will identify the surface water quantity and quality parameters to be monitored, sampling frequency and site locations. It will describe how these data may be used to determine the impacts of the operation upon the hydrologic balance.

- As discussed above, the PAP does not contain the required baseline information on ground-water quality and quantity or the required baseline information on surface-water quality and quantity. Without this information, the PHC determination is not complete. Furthermore, without complete baseline information it will be impossible to use data collected as part of the monitoring to determine the impacts of the operation upon the hydrologic balance. There simply is no basis for comparison and thus the monitoring plan is necessarily incomplete.

9) **Geologic Information.** The PAP is not complete because there is not a description of the geology of the permit and adjacent area that includes any aquifer below the lowest coal seam to be mined.

624. Geologic information will include, at a minimum, the following:
624.100. A description of the geology of the proposed permit and adjacent areas down to and including the deeper of either the stratum immediately below the lowest coal seam to be mined or any aquifer below the lowest coal seam to be mined which may be adversely impacted by mining. This description will include the regional and structural geology of the permit and adjacent areas, and other parameters which influence the required reclamation and it will also show how the regional and structural geology may affect the occurrence, availability, movement, quantity and quality of potentially impacted surface and ground water.

- The PAP (Appendix 6-4) presents the results of drill holes in the permit and adjacent area. None of the 6 drill holes in the permit and adjacent area extend further than 7 feet below the coal seam to be mined. The PAP (7-3) documents that there are at least three seeps and springs that discharge from the Dakota Formation immediately south of the permit area. Mining activities will remove the Tropic Shale and the Smirl coal seam exposing the underlying Dakota Formation and potentially impacting aquifers contained within this formation. In spite of this, there is no information in the PAP that describes the geology of any aquifers in this formation within the permit or adjacent area.

10) Geologic Sample Collection and Analysis. The PAP is not complete because samples have not been collected and analyzed from any aquifer below the lowest coal seam to be mined which may be impacted by mining.

> *624.200. For the purposes of UNDERGROUND COAL MINING AND RECLAMATION ACTIVITIES, any portion of a permit area in which the strata down to the coal seam to be mined will be removed or are already exposed, and for the purposes of SURFACE COAL MINING AND RECLAMATION ACTIVITIES, samples will be collected and analyzed from test borings; drill cores; or fresh, unweathered, uncontaminated samples from rock outcrops down to and including the deeper of either the stratum immediately below the lowest coal seam to be mined or any aquifer below the lowest coal seam to be mined which may be adversely impacted by mining. The analyses will result in the following:*
> *624.210. Logs showing the lithologic characteristics including physical properties and thickness of each stratum and location of ground water where occurring;*
> *624.220. Chemical analyses identifying those strata that may contain acid- or toxic-forming, or alkalinity-producing materials and to determine their content except that the Division may find that the analysis for alkalinity-producing material is unnecessary.*

- As discussed in #9) above, no drill holes in the permit and adjacent area extend into any aquifers in the Dakota Formation below the coal seam to be mined. There have been no samples collected or analyzed from test borings, drill cores, or fresh unweathered uncontaminated rock outcrops (624.200). There are no logs showing lithologic characteristics including physical properties and thickness of each stratum and location of ground water where occurring (624.210). And, there are no chemical analyses identifying those strata that may contain acid- or toxic-forming, or alkalinity-producing materials (624.220).

Exhibit 1

Curriculum Vitae
Elliott W. Lips, P.G.

CURRICULUM VITAE

Elliott W. Lips, Ph.D. (ABD), P.G.
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SUMMARY OF EXPERIENCE

Mr. Lips is a licensed professional geologist with 25 years experience in engineering geology and geomorphology in the western United States. He has conducted research, consulted, and taught university classes on geologic hazards, Earth surface processes, natural resource management, mine reclamation and permitting, and environmental studies. Mr. Lips is currently an engineering geologist/geomorphologist and the president of Great Basin Earth Science, Inc.

ACADEMIC AND PROFESSIONAL QUALIFICATIONS

Ph.D. A.B.D., Geography, University of Utah, Salt Lake City, Utah
M.S., Geology, Colorado State University, Fort Collins, Colorado, 1990
Graduate courses in Engineering, University of California, Berkeley, 1984-1985
B.A., Geology and Physics, Western State College, Gunnison, Colorado, 1983
Registered Professional Geologist, State of Wyoming No. 1489
Licensed Professional Geologist, State of Utah No. 5529142-2250

PROFESSIONAL HISTORY

Great Basin Earth Science, Inc., Engineering Geologist and President, 1995 - Present
Responsible for all aspects of providing consulting services for geologic hazard evaluations including faults, landslides, floods, debris flows, and rockfalls; surface water investigations and stream restoration; geologic/seismic dam safety evaluations; and paleoenvironmental reconstructions.

University of Utah, Adjunct Associate Professor, 1999 - 2006; Adj. Assist. Professor, 1996 - 1999
Responsibilities include developing curriculum and teaching courses on geomorphology and surficial processes, geologic hazards, environmental studies, and natural resource management.

AGRA Earth & Environmental, Engineering Geologist, 1992 - 1995
Project manager for engineering geologic and geologic hazard investigations. Projects were for existing, proposed, and reclaimed mines, proposed subdivisions, utility corridors, commercial developments, and dams.

JBR Consultants Group, Engineering Geologist, 1985 - 1992
Project manager for engineering geologic investigations and mine permitting and reclamation projects throughout the western United States. Directed data collection and analysis, and prepared technical reports and permitting documents for new developments, proposed and existing mining operations, and for abandoned mines.

U.S. Geological Survey, Geologist, 1983 - 1985
Conducted research on landslides, floods, and debris flows in the western U.S. (primarily in central Utah); prepared publications on processes, recent events, methods of evaluations, and methods of risk assessment.

REPRESENTATIVE RESEARCH AND CONSULTING EXPERIENCE

Geologic Hazards Evaluations

Landslide Vulnerability Assessment, Salt Lake City, Utah: Served as chair of committee of geologists and engineers and was lead author of final report to Salt Lake City. Project consisted of conducting investigations and assessing the vulnerability for all property within the limits of Salt Lake City that could be impacted by landslides. In addition, we considered lifelines entering the city, which if damaged or destroyed by landslides, would potentially result in loss of life and/or serious economic impact to the residents of the city.

Landslide and Debris-Flow Hazard Evaluation, Central Utah: Evaluated the potential for debris flows and debris floods for a 30-mile portion of the Wasatch Front. Evaluated and rated more than 90 canyons in the project area for their potential to generate an event that could impact residential communities. Conducted reconnaissance of landslides and debris flows throughout central Utah during the period of high landslide activity in 1984. Provided reports to the Utah Geological Survey on conditions of landslides and debris flows that posed hazards, and provided 24-hour emergency assistance to City and County personnel by identifying and evaluating landslides, debris flows and flood hazards.

Geologic Hazards Evaluations, Utah and Wyoming: Evaluated site conditions at approximately 20 residential lots, proposed subdivisions, and a proposed coal mine to assess geologic hazards including seismic hazards, surface and ground-water impacts, landslides, and collapsible soils. Reports have been prepared in support of obtaining approval for septic drain fields, building permits, and mining permits.

Highway Design and Construction Review, Central Utah: Conducted reviews of design drawings, and construction specifications during a three-year period of highway construction for U.S. 189 in Provo Canyon, Utah. Evaluated engineering geologic components of the project, with emphasis on slope stability of hillslopes, cuts for the roadway, and mitigative measures. Prepared numerous written documents based on site inspections, surveys, data analysis, and interpretation.

Seismic Hazard Evaluations

Liquefaction Analysis, Wasatch Front, Utah: Evaluated liquefaction potential for four sites along the Wasatch Front. Factors considered were presence and depth of liquefiable layer of loose sand identified from blow counts in previous geotechnical borings, depth of ground water, and horizontal acceleration of gravity resulting from an earthquake on nearby faults. Probability of liquefaction for specified periods of time, and the amount of settlement that would result was estimated at each site.

Fault Rupture Investigations, Western United States: Conducted aerial photo interpretation, low sun-angle aerial reconnaissance, drill log and core examination, topographic and stream channel profiling, and trench logging as part of investigations of normal and accommodation faults in Arizona, Montana, Nevada, and Utah. Have participated in, or directed, approximately 15 individual surface fault rupture investigations.

Geologic/Seismic Dam Safety Evaluations, Utah: Performed investigations to determine geologic site conditions, geologic hazards, ground motion parameters, and liquefaction susceptibility for 12 separate dam sites throughout Utah for compliance with the Utah Statutes and Administrative Rules for Dam Safety. Projects have included subsurface investigations, geologic mapping, geologic hazards evaluations, fault evaluation, and determining ground motion parameters. Mean peak horizontal accelerations for design earthquakes were estimated by attenuating fault magnitude from nearby sources, frequency-magnitude relationships, and published probabilistic estimates.

Slope Stability Modeling and Remedial Design

Landslide Analyses and Remediation, Central Utah: Conducted three separate analyses of recent landslides that occurred on a pipeline right-of-way, a reclaimed mine, and an active mine. Projects including detailed mapping of landslide features, conducting seismic profiles, installing borings and piezometers, collecting samples, conducting laboratory testing, and conducting computer stability analysis. Based on the analyses, developed remediation designs to increase stability by controlling surface and shallow ground water, and regrading the landslides to stable configurations.

Sediment Pond Stability Evaluation, Salina, Utah: Conducted stability analysis and prepared hydraulic designs for an earth embankment of a sediment pond. Stability was evaluated for full-reservoir and rapid-drawdown conditions under static and pseudo-static scenarios. Based on these analyses, a new embankment was designed and a report was prepared including construction drawings for the embankment as well as for the primary and secondary spillway structures.

Erosion and Sedimentation Evaluations

Sediment Yield Evaluation, Grants, New Mexico: Determined erosion rates, soil loss, and sediment yield from an 8,000-acre area disturbed by open-pit uranium mining. Developed a site-specific model that considered soil loss contributions from sheetwash, rill, gully, and stream-bank erosional processes. Sediment yield was evaluated for existing, post-reclamation, and pre-mining conditions at eight locations where drainages exited the mine site. The model results were tested by comparing the estimated sediment yield to the measured sediment accumulation in a downstream reservoir.

Erosion and Sediment Transport Investigation, Central Utah: Performed field measurements in ephemeral channels to document bank erosion, deposition, and impacts from past mining activities. Measured and mapped erosion features on disturbed slopes and mine waste piles, and evaluated their potential as sediment source contributors to the watershed drainage network. Calculated expected erosion rates and volumes, and modeled sediment transported in the stream channels. Assessed historic downstream deposition of tailings material.

Stream Channel and Floodplain Restoration Designs

Stream Channel Stability Evaluations and Design, Salina, Utah: Conducted an evaluation of two stream channels at a reclaimed mine site that had been damaged by high-runoff events. Channel stability was evaluated by considering the geomorphic setting, previous channel designs, stable upstream reaches, and examples from the literature. Prepared designs for reconstruction of the channels incorporating a series of buried grade control structures. Provided assistance in permitting the design and developed a program for construction supervision.

Stream Channel and Floodplain Evaluations and Design, Salt Lake City, Utah: Conducted an evaluation of existing hydrology on a 200-acre portion of the Jordan River Floodplain. Surface water features were surveyed and quantified; ground water flow was modeled based on data obtained from shallow bore holes. Designs were prepared for channels that would transfer surface water to dry parts of the floodplain in order to enhance shallow ground water available to plants. The project goals were to reestablish native floodplain vegetation to provide habitat for migratory birds. Channels were also designed to convey runoff from an adjacent site to the project area.

River Restoration, Carbon County, Utah: Designed a realignment and restoration of a 1,500-foot reach of the Price River that had been impacted by coal mining. Reviewed peak flows for various return-interval events, evaluated geomorphic stability, flow hydraulics, sediment transport, aesthetics, wildlife habitat, and costs to develop designs for river and floodplain restoration. Developed several conceptual design alternatives for client review and rated each alternative based on effectiveness, costs, long-term stability, maintenance requirements, permit considerations, and constructability.

Surface and Ground Water Investigations

Runoff and Sediment Control Plans, Utah and Nevada: Performed the hydrology and hydraulics analyses and designed integrated runoff control plans at numerous mine and industrial facilities ranging in size to 300 acres. Determined runoff volumes, peak flows, and sediment yield. Plans were developed that would: direct upgradient runoff from undisturbed watersheds through the sites; control runoff generated on the sites and prevent it from mixing with the undisturbed area runoff; minimize the potential for on-site runoff to contact pollutants; direct perennial seepage water through the sites; and provide treatment for site runoff prior to its leaving the sites. Structures designed as part of these runoff control networks include earth-lined channels, riprap channels, biodegradable erosion control channel protection, water bars, drop structures, culverted road crossings, synthetic lined channels, spillways, and sedimentation ponds.

Investigation of Potential Sources of Seepage, Great Salt Lake Beach, Utah: Conducted an evaluation of seepage and beach saturation in a complex industrial and hydrogeologic setting. Investigation consisted of reviewing reports of previous investigations, conducting field investigations and surveys, conducting finite element seepage modeling of ground-water flow, and investigating surface-water management of nearby water sources.

Investigation of Flood Sources, Central Utah: Conducted an evaluation of the cause of recent flooding on property adjacent to the Sevier River. Investigations consisted of evaluation of aerial photographs, topographic maps, records of historic floods, and determining flood magnitudes and recurrence intervals. Site investigations included floodplain mapping and surveying, aerial reconnaissance during flood events, and inspection of hydraulic control structures in order to determine source of flooding.

Paleoenvironmental Reconstruction

Investigation of Paleolakes, Central Utah: Conducted an investigation to document the presence of lacustrine ecosystems in the southern Bonneville Basin during the Paleoindian period. Sediments were retrieved from deep bore holes in four present day playas and sub basins of Lake Bonneville. Chronological control was established based on radiocarbon analysis. Paleoenvironmental conditions within the region were derived from analysis of biological and geochemical indicators preserved in the sediments.

Paleoenvironmental Reconstruction, Southeastern Wyoming: Conducted investigations to reconstruct paleoenvironmental conditions for the Snowy Range and Carbon Basin during the late Pleistocene and the Holocene. Sediment cores were retrieved from modern lakes and sediments were analyzed for biological and geochemical indicators of past climate and environmental conditions. Chronological control was established based on radiocarbon analysis.

Regulatory Evaluations/Project Reviews

Environmental Impact Statement Review, Northern Utah: Conducted a review of a Draft EIS prepared by the Army Corps of Engineers for a proposed 5,000-acre expansion of a tailings impoundment. Key technical issues were potential impacts to surface and ground water, adjacent wetlands, and the Great Salt Lake. An extensive summary report was prepared identifying specific items that needed clarification and/or additional information.

Environmental Assessment Review, Southern Utah: Conducted a review of an Environmental Assessment prepared by the BLM for a proposed chaining project on public and private land. Evaluated the geologic and hydrologic investigations conducted to support the impact assessment from sedimentation and erosion.

Hydropower Project Permitting Review, Western Colorado: Conducted reviews of the Draft and Final EIS, the Army Corps of Engineers 404 permit application, and supporting technical documents for the proposed AB Lateral Hydropower Project. The proposed project would divert about 900 cfs from the Gunnison River to the Uncompahgre River. Evaluated the impacts to the Uncompahgre River and prepared detailed technical comments on potential changes to stream geomorphology from bed scour and bank erosion.

Dam Permit Application Review, Central Utah: Conducted a review of a Federal Energy Regulatory Commission (FERC) application for a proposed dam and hydroelectric power plant on the Fremont River, near Capitol Reef National Park. Prepared comments on the adequacy of the geologic, geotechnical engineering, and hydrologic investigations conducted as part of the application package, and potential impacts to the river within the park.

Mine Permit Application Review, Southern Utah: Conducted several reviews over a three-year period of mine permit applications submitted to the Utah Division of Oil, Gas and Mining (DOGM) for a proposed coal mine on the Kaiparowits Plateau. Evaluated the hydrology and geology sections of the permit application and prepared written comments on the adequacy of the baseline investigations, probable hydrologic consequences, monitoring plans, and impacts to surface and ground water.

Highway Design and Construction Review, Central Utah: Conducted reviews of design drawings, construction specifications, permit applications and environmental documents during a three-year period of highway construction for U.S. 189 in Provo Canyon, Utah. Evaluated geologic and hydrologic components of the project and their compliance with NEPA and the Clean Water Act. Prepared numerous written documents based on site inspections, surveys, data analysis, and interpretation.

Mine Permit Application Review, Central Utah: Conducted several reviews over a seven-year period of mine permit applications submitted to the Utah Division of Oil, Gas and Mining (DOGM) for a proposed coal mine along the Book Cliffs. Evaluated the hydrology and geology sections of the permit application and prepared written comments on the adequacy of the baseline investigations, probable hydrologic consequences, monitoring plans, and impacts to surface and ground water.

PUBLICATIONS

Wieczorek, G. F., Ellen, Stephen, Lips, E. W., Cannon, S. H., and Short, D. N., 1983, Potential for debris flow and debris flood along the Wasatch Front between Salt Lake City and Willard, Utah, and measures for their mitigation: U.S. Geological Survey Open-File Report 83-635, 25 p., map scale 1:100,000, Reprinted in Utah State Bar, 1983, Conference on Legal and Legislative Approaches to Western States Geological Hazards: November 1983, Salt Lake City, p. 53-116.

Lips, E. W., Wieczorek, G. F., and Boschetto, H. B., 1984, Factors influencing debris-flow runout: Delineation of Landslides, Flash Floods and Debris Flow Hazards in Utah, Logan Utah, Abstracts, p. 9.

Wieczorek, G. F., Ellen, Stephen, Lips, E. W., Cannon, S. H., and Short, D. N., 1984, Identification of debris flow and debris flood potential along the Wasatch Front between Salt Lake City and Willard, Utah: Delineation of Landslides, Flash Floods and Debris Flow Hazards in Utah, Logan Utah, Abstracts, p. 9.

Keefer, D. K., Wilson, R. C., Harp, E. L., and Lips, E. W., 1985, Landslides in the Borah Peak, Idaho earthquake of 1983 in Reaveley, L. D., ed. The Borah Peak, Idaho Earthquake of October 28, 1983: Earthquake Engineering Research Institute Reconnaissance Report, p. 91-125.

Lips, E. W., Ellen, S., and Wieczorek, G. F., 1984, Identifying debris flow and debris flood potential along the Wasatch Front between Salt Lake City and Willard, Utah: Geological Society of America, Abstracts with Programs, v.16, no. 6, p. 576.

Lips, E. W., 1985, Landslides and debris flows east of Mount Pleasant, Utah, 1983 and 1984: U.S. Geological Survey open-File Report 85-382, 12 p., map scale 1:24,000.

Lips, E. W., 1988, Grain size parameters of debris flows and hyperconcentrated flows, in Julien, P. J., ed., Essays on River Mechanics: Colorado State University, p. 15-26.

Lips, E. W., and Keaton, J. R., 1988, Slope-a-scope: a convenient tool for rapid topographic profiling: Association of Engineering Geologists, Abstracts with Programs, p. 51.

Wieczorek, G. F., Lips, E. W., and Ellen, S. D., 1989, Debris flows and hyperconcentrated floods along the Wasatch Front, Utah, 1983 and 1984: Bulletin of the Association of Engineering Geologists, v. 26, no. 2, p. 191-208.

Lips, E. W., 1990, Characteristics of debris flows in central Utah, 1983: Fort Collins, Colorado, Colorado State University M.S. thesis, 66 p.

Lips, E. W., and Wieczorek, G. F., 1990, Recurrence of debris flows on an alluvial fan in central Utah in French, R. H., ed., Hydraulics/ Hydrology of Arid Lands: American Society of Civil Engineers, p. 555-560.

Keaton, J. R. and Lips, E. W., 1994, Why probabilistic estimates sometimes exceed deterministic estimates for the maximum earthquake acceleration: Association of Dam Safety Officials, 1994 Western Regional Conference Proceedings, p. 99-104.

Lips, E. W. and Keaton, J. R., 1994, The operating basis earthquake for dams: making sense of the numbers game: Association of Engineering Geologists 37th Annual Meeting, Program and Abstracts, p. 54.

Currey, D., Lips, E. W., Thein, B., Wambeam, T., and Nishazawa, S., 2001, Elevated Younger Dryas lake levels in the Great Basin, western U.S.A.: Geological Society of America, Abstracts v. 33, no. 6, p. A-217.

Lips, E. W., Marchetti, D. W., and Gosse, J., 2005, Revised chronology of late Pleistocene glaciers, Wasatch Mountains, Utah: Geological Society of America, Abstracts v. 37, no. 7, p. 41.

Godsey, H. S., Atwood, G., Lips, E. W., Miller, D. M., Milligan, M., and Oviatt, C. G., 2005, Don R. Currey Memorial Field Trip to the shores of Pleistocene Lake Bonneville: Geological Society of America, Field Trip Guide 6, p. 419-448.

Marchetti, D. W., Cerling, T. E., and Lips, E. W., 2005 A glacial chronology for the Fish Creek drainage of Boulder Mountain, Utah, USA: Quaternary Research 64, p. 263-271.

Exhibit 2

Letter From: State of Utah
Department of Natural Resources
Division of Wildlife Resources

To: State of Utah Public Lands Policy Coordination

February 23, 2007

0016

From: Carmen Bailey
To: Pam Grubaugh-Littig
Date: 10/30/2007 1:52 PM
Subject: UDWR Alton comment letter
Attachments: Alton signed.pdf

Here is our comment letter on Alton.
Thanks, Carmen

Incoming #
C/055/0005

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah

Department of Natural Resources

MICHAEL R. STYLER
Executive Director

Division of Wildlife Resources

JAMES F. KARPOWITZ
Division Director

February 23, 2007

Carolyn Wright
Public Lands Policy Coordination
Office of the Governor
5110 State Office Building
Salt Lake City, Utah 84114-1107

Subject: RDCC #7336 Federal Coal Lease Application Filed by Alton Coal Development LLC

Dear Ms. Wright:

The Utah Division of Wildlife Resources (UDWR) has reviewed the draft of the RMP/EIS for the Kanab Field Office BLM. We provide the following comments:

UDWR has concerns about a greater sage-grouse lek near Alton, the southernmost existing lek rangewide. Based on all existing data, the proposed coal mine would be expected to result in the destruction of this greater sage-grouse lek. To date, there are no documented instances of successful transfers of a lek by way of experimental introductions. From a wildlife standpoint, the lek would appear incompatible with coal mining activity of the type contemplated near Alton, which would involve removal of the overburden where the coal is approximately 30 feet below the surface. Generally, we would suggest mitigation measures to compensate for the loss of wildlife (Example: Mitigation in the form of habitat restoration for loss of elk or mule deer winter range), however, there are no alternatives or reparations known to suitably replace a greater sage-grouse lek.

Another issue of importance concerns the coal dust impact on water quality. Haul trucks, if not properly covered, could produce large quantities of coal dust potentially impacting aquatic life inhabiting Asay, Kanab, and Mammoth creeks, as well as the upper Sevier River. We encountered similar problems along Salina Creek when the SUFCO mine began heavy hauling which resulted in layers of coal dust entering the creek.

Thank you for the opportunity to comment on this draft document. We look forward to working with the Kanab BLM on both RMP and project-specific activities. If you have further questions, please contact Bruce Bonebrake, Habitat Manager, in our Cedar City Office at (435) 865-6112.

Sincerely,

James F. Karpowitz

James F. Karpowitz

JFK/cb

1594 West North Temple, Suite 2110, PO Box 146301, Salt Lake City, UT 84114-6301
telephone (801) 538-4700 • facsimile (801) 538-4709 • TTY (801) 538-7458 • *www.wildlife.utah.gov*

Exhibit 3

Letter from: State of Utah
Office of the Governor
Public Lands Policy Coordination

To: Bureau of Land Management

March 1, 2007

Office of the Governor
PUBLIC LANDS POLICY COORDINATION

LYNN H. STEVENS
Public Lands Policy Coordinator

State of Utah

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

March 1, 2007

Keith Rigtrup
Bureau of Land Management
Kanab Field Office
318 North 100 East
Kanab, Utah 84741

SUBJECT: Federal Coal Lease Application Filed by Alton Coal Development LLC

Dear Mr. Rigtrup:

Thank you for the opportunity to provide comments on the Federal Coal Lease Application (LBA) filed by Alton Coal Development LLC and the accompanying Notice of Intent to Prepare an Environmental Impact Statement. The State of Utah generally is in favor of the responsible development of natural resources, such as coal, and understands that determining the nature of responsible development can be difficult, and is dependant upon the situation in each particular area. The State of Utah cares about every issue that will be examined in the EIS, and looks forward to discussions with BLM on its scope and content.

The state (through the Division of Wildlife Resources) has identified a greater sage-grouse lek on private land south of the town of Alton, adjacent to the federal lands subject to the LBA The State, as a signatory party to a Conservation Agreement concerning the greater sage-grouse, has committed to the continued viability of the species. Peer reviewed research on the distribution of the sage-grouse in the Western United States indicates that this lek is currently the southernmost lek within the current range of the species. The UDWR advises that, to date, there are no documented reparations of sage-grouse by way of experimental re-introductions. Therefore, the State recommends that the Kanab Field Office anticipate evaluating the potential impacts to the species, as well as potential mitigation measures, in consultation with the State during mining and reclamation planning. The State also recommends the BLM evaluate the efforts of other field offices around the West in addressing similar issues.

The State also requests, at the appropriate time, analysis of the impacts of coal dust on water quality. Haul trucks, if not properly covered, may produce coal dust that could impact Asay, Kanab, and Mammoth creeks, as well as the upper Sevier River.

Please direct any other written questions regarding this correspondence to Val Payne, at (801) 537-9297.

Sincerely,

John Harja
Assistant Director
for Policy and Planning

EXHIBIT 2

SOUTHERN UTAH WILDERNESS ALLIANCE *ET AL.*

COMMENTS AND OBJECTIONS RE: PROPOSED COAL HOLLOW MINE, C/025/0005

May 22, 2008

Daron Haddock
Utah Division of Oil, Gas and Mining
Box 145801
Salt Lake City, Utah 84114-5801

RE: Comments on Alton Coal Development, LLC, Notice of Intent to Process Coal from Surface Mining, Coal Hollow Mine – Coal Sizing and Stockpiling Facility, Kane County, UT, Regarding Air Quality Impacts

Dear Mr. Hadock,

I am writing to submit comments on Alton Coal Development's Coal Hollow Permit Application, C/025/0005 (Permit Application). I have reviewed the materials included in Chapter 4 of the Permit Application pertaining to air quality, as well as Appendix 4-2, dated May 8, 2007 prepared by JBR Consultants and submitted to the Utah Division of Air Quality. I have the following comments related to the potential air quality impacts of the proposed project. I prepared these comments under contract for the Southern Utah Wilderness Alliance.

To date, there has been no air quality impact analysis completed for the proposed mine prior to the Division of Oil, Gas and Mining's (Division) determination that the Permit Application was administratively complete. The Air Quality Report to the Division of Air Quality (p. 1) says that air quality impacts are discussed in Section 6.0. (The Air Quality Report is found in Appendix 4-2 of the Permit Application). However, Section 6.0 indicates that, according to DAQ Guidance, modeling of PM_{10} impacts is required for this source but that modeling has not yet occurred. Furthermore, according to the Division of Air Quality the source has not filed a Notice of Intent with the Division and there is currently no air quality permit being processed by the DAQ.[1] The Division must know the impacts of the proposed source on air quality and the cumulative impacts of the proposed action along with other existing and proposed sources in the region before issuing a permit for the source. It is difficult to understand the Division's conclusion that the Permit Application is administratively complete given the lack of air quality data and information. Per the State's Coal Mine Permitting: Permit Application Requirements (UAC R645-301-420 to 425) the State must assure the "operations will be conducted in compliance with the requirements of the Clean Air Act (CAA) and any other applicable Utah or federal statutes and regulations containing air quality standards" (UAC R645-301-421). Therefore, the Division must ensure the source will demonstrate compliance with the National Ambient Air Quality Standards (NAAQS) and prevention of significant deterioration (PSD) requirements prior to issuing any permit to the source. This cannot be achieved until a thorough analysis of the best available control technologies (BACT) is completed by the State and the associated ambient air impacts from the proposed sources are assessed.

[1] Correspondence with Tom Bradley, DAQ, May 21, 2008.

In addition to a full assessment of the sources' impacts on the PM_{10} NAAQS, the State must also assess fine particle emissions ($PM_{2.5}$) from the proposed mine and include an assessment of the impacts of fine particle emissions from the proposed activities on compliance with the $PM_{2.5}$ NAAQS. The only way to know for sure if there is the potential for violations of the coarse and fine particle NAAQS is for the source to include in its application a modeling analysis of the effects of the proposed increases in emissions due to the mine on ambient air concentrations in the area. Only then can the Division be assured that CAA requirements are met.

In the modeling analysis to determine NAAQS compliance, all other sources in the area that will impact the same area impacted by the proposed mine must be accounted for as well. The potential background concentration used for these purposes must reflect current maximum concentrations in the area. The applicant has not identified background levels of air quality in the area for any pollutant. If neighboring areas (e.g., Vernal, Price, Moab, etc.) are any indication, background concentrations of both $PM_{2.5}$ and ozone are likely already high and leave little room for additional growth in emissions. For the Division to proceed in issuing a permit that will allow for growth in the emissions that contribute to $PM_{2.5}$ and ozone concentrations in the area without requiring any kind of quantitative assessment of ambient air impacts is extremely shortsighted when one considers the impacts of these air pollutants to human health and the environment. The Division must address this by ensuring overall air quality compliance throughout the affected area.

The approach of assuming all other sources that impact the area are reflected in a monitored background concentration, however, may not be applicable in this case for analyzing emissions impacts. Background air monitoring data are generally added to the results of a modeling analysis in determining compliance with the NAAQS. However, as discussed in EPA's Guideline on Air Quality Models, if the source being modeled is not isolated, as is likely the case for the proposed mine, then modeling of existing sources is necessary to determine the potential contribution of background sources. See Section 9.2.1 of 40 C.F.R. Part 51, Appendix W. Thus, unless it can be demonstrated that the impacts of all existing sources are reflected in available background monitoring data, and shown that the monitoring data are reflective of maximum concentrations in the area, the Division cannot rely on the use of background monitoring data to reflect all existing sources in or affecting the area. These sources must be modeled along with the proposed mine sources.

The area of the proposed mine is nearby to quite a bit of existing and proposed development. The Dixie National Forest and the Bureau of Land Management (BLM) recently released a reasonably foreseeable development scenario for oil and gas development in the Dixie National Forest (and surrounding areas that impact the Forest lands) that predicts 135 new oil and gas wells over the next 15 years.[2] The Dixie National Forest also conducts prescribed burns on Forest lands, likely very near to the proposed mining operations. Later this year, Palladon Iron Corp. is proposing to re-open the iron mine near Cedar City, Utah and operate a 2 million metric ton per year iron ore facility. There is also the already-permitted

[2] Reasonably Foreseeable Development Scenario for Oil and Gas, Dixie National Forest, June 25, 2007, p. 14.

Intermountain Power Unit 3 950 MW coal-fired boiler in nearby Delta, Utah. The Division must also consider the potential cumulative impacts from these nearby sources when assessing the air quality impacts of the proposed mining activities.

PM impacts are of particular concern since there have been a number of smaller oil and gas development areas in other parts of Utah that have shown the potential to violate NAAQS and PSD increments. For example, the final Enduring Resources Saddletree Draw Leasing and Rock House Development EA (Rock House EA) for 60 wells predicted $PM_{2.5}$ levels at over 90% of the short-term NAAQS and predicted violations of the PM_{10} Class II increment.[3] The Kerr-McGee Bonanza Project for 95 oil and gas wells predicted 24-hr PM_{10} concentrations well above the PM_{10} NAAQS.[4] These are just two examples. Considering the potential growth in oil and gas development in the area it is critical that the Division ensure that the proposed increase in PM emissions from the mine along with all other PM emissions in the area do not result in PM NAAQS or PSD increment violations.

The EPA recently lowered the short-term $PM_{2.5}$ standard from 65 $\mu g/m^3$ to 35 $\mu g/m^3$ because scientific information showed that the pollutant is a health concern at levels lower than what the previous standard allowed.[5] Fine particles with an aerodynamic diameter of 2.5 microns or less ($PM_{2.5}$) can become lodged deep in the lungs or can enter the blood stream, worsening the health of asthmatics and even causing premature death in people with heart and lung disease. Fine particles are also a major contributor to visibility impairment. See the EPA's staff paper on particulate matter (EPA-452/R-05-005a, December 2005) as well as the EPA's Air Quality Criteria Document for Particulate Matter (EPA/600/P-99/002aF and EPA/600/P-99/002bF, October 2004) for more detailed information on the health effects of fine particles. Because of the potential health impacts, it is essential that the Division fully consider the $PM_{2.5}$ impacts from the proposed mine along with all other sources impacting the same area. The Division will need more information than what is supplied in the source's application to make this determination.

More recently the EPA lowered the ozone NAAQS. Exposure to ozone is a serious concern as it can cause or exacerbate respiratory health problems, including shortness of breath, asthma, chest pain and coughing, decreased lung function and even long-term lung damage.[6] According to a recent report by the National Research Council "short-term exposure to current levels of ozone in many areas is likely to contribute to premature deaths".[7] The EPA recently revised the 8-hour ozone standard from 80 ppb to 75 ppb.[8] However, according to the Clean Air Scientific Advisory Committee, even ozone concentrations at levels as low as 60 ppb can be considered harmful to human health.[9] As mentioned previously, it is quite possible

[3] December 2007 Final Enduring Resources' Saddletree Draw Leasing and Rock House Development Proposal EA (UT-080-2007-671)
[4] October 30, 2006 Kerr McGee Bonanza Environmental Assessment, UT-080-06-240.
[5] 71 FR 61144, effective December 18, 2006
[6] See EPA's National Ambient Air Quality Standards for Particulates and Ozone, 62 FR 38,856 (July 18, 1997).
[7] http://www.nationalacademies.org/morenews/20080422.html
[8] 73 FR 16436, Effective May 27, 2008.
[9] EPA-CASAC-LTR-07-001, Clean Air Scientific Advisory Committee's (CASAC) Peer Review of the Agengy's 2nd Draft Ozone Staff Paper, October 24, 2006

that ozone concentrations in the area are already elevated. Background ozone concentrations in Zion NP in 2005 were 91 ppb (4th highest maximum 8-hour average), far in excess of the new standard and well above levels known to cause health impacts. Other areas in the state are also experiencing levels of ozone approaching the new NAAQS (e.g., Canyonlands NP, Vernal, etc.). The State must consider the big picture when allowing for new source growth in any area. $PM_{2.5}$ and ozone formation can be dependant on each other and both must be considered when assessing the impact of either one. The presence of ozone can be an important factor affecting secondary $PM_{2.5}$ formation and strategies for reducing ozone (e.g., choosing VOC reductions over NO_x reductions) can also affect secondary $PM_{2.5}$ formation. It is in the State's best long-term interest to fully consider the existing air quality in an area before allowing for new growth in sources of one pollutant that may be impacted by high levels of another (e.g., high ozone levels in the area may increase $PM_{2.5}$ concentrations).

In order to ensure all CAA requirements are met, the Division must also know what the impacts to visibility in nearby Class I areas are and how much of the available PSD increments will be consumed. Class I areas of concern include Bryce Canyon NP, Capitol Reef NP, Zion NP and Grand Canyon NP. As indicated in Federal Land Manager comments during the scoping process for the Alton Coal Tract Leasing Application EIS, protection of PSD increments and visibility must be ensured in the affected Class I areas,[10]

Even though the applicable air permitting requirements for this proposed minor source do not explicitly require an analysis of PSD increment consumption, the State still has a responsibility to track increment consumption, in general, and prevent significant deterioration of air quality in clean air areas (see 40 CFR 51.166(a)(4) and (3)). This broader issue, related to the cumulative impacts from significant oil and gas development activities and other minor source growth in the area, is something the State must stay on top of as it continues to approve permits for new sources in the area.

Thank you for consideration of my comments. I have over 10 years of experience working on air quality issues and have enclosed my curricula vitae for further information on my expertise.

Sincerely,

Megan M Williams

Megan M. Williams
megan@sevenfivesix.org
756 Cottage Lane
Boulder, CO 80304

Cc: Tom Bradley, Utah Division of Air Quality
Jon Black, Utah Division of Air Quality
Eddie Lopez, Bryce Canyon National Park

[10] February 26, 2007 letter from USDA to BLM and February 23, 2007 letter from NPS to BLM.

Megan M. Williams

756 Cottage Lane • Boulder, CO 80304 • 303 - 245 - 0932 • megan@sevenfivesix.org

FOCUS AREA

Analysis and research in support of policy and advocacy that promotes environmental protection. Specific experience and interest in clean air issues.

SKILLS

Over 10 years of experience working on air quality issues

Technical and Policy areas of expertise
- Analyzing and characterizing air emissions from a variety of air pollution sources
- Determining air emissions reduction potentials from control technology scenarios
- Reviewing new, existing and modified state air quality regulations to determine if they meet federal Clean Air Act requirements
- Reviewing proposed federal and state air quality rules and policy to determine if they are as rigorous and stringent as possible
- Thorough understanding of the requirements of the nonattainment new source review and prevention of significant deterioration construction permit programs and Title V operating permit program

Computer skills
- Highly proficient in MS Windows and Macintosh
- Experienced with numerous standard software packages
- Experienced writing programs to perform data analysis (*e.g.*, Excel macros, etc.)

Communication skills
- Experienced and thorough in writing both technical and policy documents
- Presented half-day technical seminars on Indoor Air Quality (to teachers, maintenance staff, etc.)
- Was active in EPA's Environmental Education Council

Completed numerous technical and policy courses offered by the EPA Education and Outreach Program

PROFESSIONAL EXPERIENCE

VARIOUS ENVIRONMENTAL ORGANIZATIONS — Boulder, CO
July 2003–present

Air Quality Consultant
- Provide a variety of technical and policy analyses related to national, regional and local air quality and energy issues. The analyses include technical and policy research, the production of written documents and analysis, quantitative assessments and qualitative analyses.

U.S. ENVIRONMENTAL PROTECTION AGENCY — Denver, CO
January 1998–November 2002

Environmental Engineer, May 2000–November 2002
Air Quality Planning Group

- Region 8 lead for nonattainment new source review and prevention of significant deterioration policy development and analyses (2001–2002)
- Reviewed state rules and rule changes related to new source review permitting to determine if they met federal Clean Air Act requirements
- Prepared official documents to approve or disapprove state implementation plan revisions
- Reviewed PM_{10} redesignation requests and prepared official documents for redesignating PM_{10} nonattainment areas to attainment
- Primary contact for Wyoming air issues (2001–2002)
- Compiled EPA-approved implementation plan for Wyoming
- Participated in national working group to re-examine EPA's existing policy on redefining "baseline areas" under the Clean Air Act. Planned and hosted national workgroup meeting in Denver to develop criteria for approving baseline area redesignations. Helped author a Technical Memo to EPA's Office of Air Quality Planning & Standard's Director proposing use of the new criteria
- Received Superior Accomplishment Recognition for technical and policy work on an air quality dispersion modeling analysis of Prevention of Significant Deterioration (PSD) increment consumption in North Dakota and eastern Montana (report available upon request).

Regional Indoor Air Quality Coordinator, January 1998–May 2000

- Managed EPA Region 8's voluntary Indoor Air Quality Program
- Provided technical assistance and outreach to schools, state/local officials and the general public
- Initiated and managed research projects to assess indoor air quality interventions
- Developed and maintained regional IAQ website
- Received Superior Accomplishment Recognition for working with schools to voluntarily implement EPA's Indoor Air Quality Tools for Schools program
- Received regional award for Excellence in Environmental Education

WISCONSIN DEPARTMENT OF NATURAL RESOURCES — Madison, WI

Air Management Engineer, January 1997–December 1997

- Wrote Title V Operating Permits for sources in northwest Wisconsin (*e.g.*, power plants, paper mills, breweries, and military operations)

Air Management Intern, August 1995–December 1996
(part-time position in conjunction with the Air Resources Management graduate program at UW - Madison)

- Wrote Title V Operating Permits for sources in northwest Wisconsin
- Developed statewide general Title V Operating Permits for small heating units and ethylene oxide sterilizers

EDUCATION

UNIVERSITY OF WISCONSIN – MADISON
Institute for Environmental Studies
Master of Science, Air Resources Management, December 1996

UNIVERSITY OF COLORADO – BOULDER
College of Engineering and Applied Sciences
Bachelor of Science, Applied Mathematics (emphasis Mechanical Engineering), May 1995

EXHIBIT 3

SOUTHERN UTAH WILDERNESS ALLIANCE *ET AL.*

COMMENTS AND OBJECTIONS RE: PROPOSED COAL HOLLOW MINE, C/025/0005

Alton Mine – Socioeconomic Issues

These comments refer to the socioeconomic analyses for the proposed Alton Mine.

1. Socioeconomic analyses must address the impacts to the broader region since the proposed mine would likely involve housing of workers and transportation of coal through several communities outside of Kane County.
2. Socioeconomic analyses must account for the non-market values associated with undeveloped wild lands.
3. Socioeconomic analyses must address the potential benefits to the local area economies from management to protect the natural amenities of the surrounding area.
4. Socioeconomic analyses must address the potential socioeconomic costs associated with coal mining.

1. The Affected Region Must Include Garfield County

While the proposed Alton Coal Mine would be located in Kane County, most of the negative socioeconomic impacts will occur outside the county, especially in Garfield County. The proposal describes transportation of the mined coal through Garfield County and also asserts that the workers for the mine will be housed in communities in Garfield County. For this reason the analysis of the impacts must include impacts to a much larger area.

2. Non-Market Values

The proposed Alton Mine would have significant impacts on the surrounding undeveloped public lands, which will diminish their non-market economic value. Non-market values have been measured and quantified for decades. There is a well established body of economic research on the measurement of non-market values, and the physical changes (decreases in the source of these values) brought about by oil and gas development and motorized recreation are very easy to measure quantitatively.

One of the most important purposes of public lands is the provision of public goods or non-market goods. These are things like opportunities for solitude, outdoor recreation, clean air, clean water, the preservation of wilderness and other undeveloped areas that would be underprovided if left entirely to market forces. It is important that these public goods are provided and in quantities that meet the demand, not just of local residents, but of every U.S. citizen.

This analysis is especially important when considering actions which would impair lands with wilderness characteristics since these lands produce benefits and values that are seldom captured in the existing market structure. The literature on the benefits of wilderness is well established and should be used to estimate the potential value of any public lands, but especially those with wilderness characteristics, which may be affected by the proposed Alton Mine. Krutilla (1967) provides a seminal paper on the valuation of wilderness lead the way for countless others who have done research all providing compelling evidence that these lands are worth much more in their protected state. Morton (1999), Bowker et al. (2005) Krieger (2001) and Loomis and Richardson (2000) provide an overviews of the market and non-market, use and non-use values of wilderness and wildlands. See Walsh et al. (1984), Bishop and Welsh (1992), Gowdy (1997), Cordell et al. (1998), Loomis and Richardson (2001) and Payne et al (1992) for several more examples.

Peer reviewed methods for quantifying both the non-market and market costs of changing environmental quality have been developed by economists and are readily applicable to the present case. For a catalog of these methods see Freeman (2003). For a complete socioeconomic analysis, these methods should be adapted to conditions in the area that will be impacted by the proposed Alton Mine to ensure that all the potential impacts are accounted for.

Recommendations: Changes in non-market values associated with the proposed Alton Mine and other development in the area must be measured. To do otherwise omits a very important socioeconomic impact that is the direct result of the proposed development. This analysis must include the passive use values of undeveloped lands such as the lands with wilderness characteristics.

3. Economic Impacts of Natural Amenities

The proposed Alton Mine will undoubtedly have impacts on the economies of communities in the surrounding area. The economic impact that natural amenities such as those found on undeveloped public lands have on local economies is well documented and has grown in importance as the U.S. moves from a primary manufacturing and extractive economy to one more focused on professional and service sector industries. This shift means that many businesses are free to locate wherever they choose The "raw materials" upon which these businesses rely are people, and study after study has shown that natural amenities attract a high-quality, educated, talented workforce – the lifeblood of these businesses. The analysis of the socioeconomic impacts of the proposed mine and other development in the area must account for the impacts that such development will have on the natural amenities in the surrounding communities. Any impairment or reduction in wilderness quality lands will have impacts on local businesses.

More and more evidence has accrued indicating that the West is not a resource-dependent region. The public lands, including those which are likely to be impacted by the Alton Mine and other development in the area, are increasingly important for their non-commodity resources – scenery, wildlife habitat, wilderness, recreation opportunities, clean water and air. A vast and growing body of research indicates that the economic prosperity of rural Western communities depends more and more on these amenities and less and less on the extraction of natural resource commodities. See Bennett and McBeth 1998, Deller et al. 2001, Duffy-Deno 1998, Johnson and Rasker 1993 and 1995, Johnson 2001, Lorah 2000, Lorah and Southwick 2003, McGranahan 1999, Morton 2000, Nelson 1999, Power 1995 and 1996, Rasker et al. 2004, Reeder and Brown 2005, Rudzitis 1999, Rudzitis and Johansen 1989, Shumway and Otterstrom 2001, Snepenger et al 1995, Vias 1999, Whitelaw and Niemi 1989 and Haefele et al. 2007 for some examples.

New residents in the rural West often bring new businesses, and more and more of these are not tied to resource extraction. Some are dependent directly on the recreation opportunities on the surrounding public lands. Other entrepreneurs are attracted to the area for the same resources. The Federal Reserve Bank of Kansas City has found that the level of entrepreneurship in rural communities is correlated with overall economic growth and prosperity (Low 2004). These businesses may be harmed or deterred if the quality of the scenic and natural amenities is harmed due to proposed Alton Mine and other development in the area.

Retirees and other who earn non-labor income are also important to rural western communities. This income is important for the counties which will potentially be impacted by

the proposed mine – making up 27% of total personal income in Garfield County and 26% in Kane County, making it one of the largest sources of income in the affected area.[1] Retirees are attracted by natural amenities that are available on undeveloped public lands. The potential impact that proposed mine will have on this source of income and economic activity must be accounted for.

Recommendations: The analysis of the socioeconomic impacts of the proposed Alton Mine must include the potential impacts that such development will have on businesses and individuals who rely on the natural and scenic amenities of the area.

This analysis must include a thorough examination of the full socioeconomic impacts likely to occur if the proposed mine and other development is implemented. These analyses must take into account the impacts that such development will have on the surrounding communities, including the added cost of providing services and infrastructure, the long-term costs of the likely environmental damage, and the impacts on other sectors of the economy. The analysis should also examine the role that protected public lands (including lands with wilderness characteristics) play in the local economy.

The attached brief, "*Socio-Economic Framework for Public Land Management Planning: Indicators for the West's Economy*" (The Wilderness Society, 2006), includes more detail on the types of analyses that should be conducted to perform a complete review of the socioeconomic benefits of undeveloped lands and the potential impacts of the proposed mine on the surrounding communities.

4. Costs of Extractive Industries

The proposed Alton coal mine is likely to have major long-term socioeconomic impacts on the surrounding communities. The negative impacts of boom and bust cycles in resource extraction are well documented. There is a considerable body of peer-reviewed academic literature on the social structure and economic performance of resource dependent communities. This research has indicated that an emphasis on resource extraction results in inherently economically unstable communities (Fortmann et al. 1989, Freudenburg 1992, Freudenburg and Gramling 1994). This instability in income and employment is usually a result of labor saving technological improvements and fluctuations in world resource markets - macroeconomic forces completely outside local control. Such economic instability and lack of local control can be expected with both coal and oil and gas development.

Other communities within Utah and throughout the region have been experiencing rapid oil and gas development that has confirmed the observations in the research noted above. Smith (1986) observed that oil and gas drilling booms extend drilling into marginal areas that were abandoned when prices dropped – leading to the bust portion of the boom-and-bust cycle. Smith also noted that the areas with the largest rate of growth also experienced the largest rate of decline. Goldsmith (1992) and Guilliford (1989) have also documented the problems associated with the boom and bust nature of resource extraction.

Other negative impacts include changes in the local social and cultural make up of communities as drilling crews and workers migrate into the area (Merrifield 1984, Davenport

[1] U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System (http://www.bea.gov/)

and Davenport 1980), changing populations and often leading to increased demand for housing which raises prices (Brabant and Gramling 1997). In addition to the social and economic instability, natural resource extraction also has negative impacts on the landscape (Morton et al. 2004). The attached brief, *"The Economic & Social Impacts of Oil and Gas Development"* (The Wilderness Society 2006) discusses some of these costs in more detail, which while focused on oil and gas drilling, certainly pertain to other resource extraction, including the proposed Alton Coal Mine.

Recommendations: The socioeconomic analyses for the proposed Alton Mine must consider the long-term negative impacts associated with over-dependence on the resource extraction sectors.

Attachments

The Wilderness Society. 2006. *Socio-Economic Framework for Public Land Management Planning: Indicators for the West's Economy* Washington DC: The Wilderness Society.

The Wilderness Society. 2006. *The Economic & Social Impacts of Oil and Gas Development* Washington DC: The Wilderness Society.

References

Bennett, K., and M.K. McBeth. 1998. Contemporary western rural USA economic composition: Potential implications for environmental policy and research. *Environmental Management* 22(3): 371-381.

Bishop, R. C. and M. P. Welsh. 1992. Existence Values in Benefit-Cost Analysis and Damage Assessment. *Land Economics* 68(4): 405-417.

Bowker, J. M., J. E. Harvard III, J. C. Bergstrom, H. K. Cordell, D. B. K. English, and J. B. Loomis. 2005. The net economic value of wilderness. In: Cordell, H. K., J. C. Bergstrom, and J.M. Bowker (eds), *The Multiple Values of Wilderness*. State College, PA: Venture Publishing.

Brabant, S. and R. Gramling. 1997. Resource extraction and fluctuations in poverty: A case study. Society & Natural Resources 10(1): 97-106.

Cordell, H.K., M.A. Tarrant, B.L. McDonald and J. C. Bergrstrom. 1998. How the public views wilderness: More results form the USA survey on recreation and the environment. *International Journal of Wilderness* 4(3): 28-31.

Davenport, J. and J. A. Davenport (eds). 1980. *The Boom Town: Problems and Promises in the Energy Vortex*. Laramie WY: University of Wyoming, Department of Social Work.

Deller, S.C., T. Tsai, D.W. Marcouiller, and D.B.K. English. 2001. The Role of Amenities and Quality of Life in Rural Economic Growth. *American Journal of Agricultural Economics* 83(2): 352-365.

Duffy-Deno, K. T. 1998. The Effect of Federal Wilderness on County Growth in the Intermountain Western United States. *Journal of Regional Science* 38(1): 109-136.

Fortmann, L.P., J. Kusel, and S.K. Fairfax. 1989. Community stability: The foresters' fig leaf. Pages 44-50 in: Le Master, D.C., and J.H. Beuter, Eds. *Community Stability in Forest-Based Economies* . Timber Press, Portland, OR.

Freeman, A.M. III, 2003, *The Measurement of Environmental and Resource Values*, 2nd Edition, Resources for the Future, Washington, D.C.

Freudenburg, W.R. 1992. Addictive economies: extractive industries and vulnerable localities in a changing world economy. Rural Sociology 57:305-332.

Freudenburg, W.R. and R. Gramling. 1994. Natural resources and rural poverty: A closer look. Society and Natural Resources 7:5-22

Goldsmith, O.S. 1992. Economic instability in petroleum-based economies. Presented at OPEC/Alaska Conference on Energy Issues in the 1990's. Anchorage AK, July 23-24, 1992.

Gowdy, J. M. 1997. The Value of Biodiversity: Markets, Society, and Ecosystems. *Land Economics* 73(1): 25-4`.

Guilliford, Andrew. 1989. *Boomtown Blues: Colorado Oil Shale 1885-1985*. Niwot, CO: University Press of Colorado.

Haefele, M., P. Morton, and N. Culver. 2007. *Natural Dividends: Wildland Protection and the Changing Economy of the Rocky Mountain West*. Washington, D.C.: The Wilderness Society. (available at: http://www.wilderness.org/Library/Documents/NaturalDividends.cfm).

Johnson, T.G. 2001. The Rural Economy in a New Century. *International Regional Science Review* 24(1): 21-37.

Johnson, J. and R. Rasker. 1993. The Role of Amenities in Business Attraction and Retention. *Montana Policy Review 3(2).*

Johnson, J., and R. Rasker. 1995. The Role of Economic and Quality of Life Values in Rural Business Location. *Journal of Rural Studies* 11(4): 405-416.

Krieger, D. J. 2001. Economic Value of Forest Ecosystem Services: A Review. Washington D.C.: The Wilderness Society.

Krutilla, J. 1967. Conservation reconsidered. *American Economic Review*. 57: 787-796.

Loomis, J. B. and R. Richardson. 2000. Economic Values of Protecting Roadless Areas in the United States. Washington, D.C.: The Wilderness Society and Heritage Forests Campaign.

Loomis, J. B. and R. Richardson, 2001. Economic values of the U.S. wilderness system: Research evidence to date and questions for the future. *International Journal of Wilderness* 7(1): 31-34.

Lorah, P. 2000. Population Growth, Economic Security and Cultural Change in Wilderness Counties. In McCool, S.F., D.N. Cole, W.T. Borrie, and J. O'Loughlin, comps. Wilderness Science in a Time of Change Conference, Volume 2: Wilderness within the Context of Larger Systems, 1999 May 23-27. Missoula, MT. Proceedings RMRS-P-15-VOL 2., U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Ogden, UT.

Lorah, P. and R. Southwick. 2003. Environmental Protection, Population Change, and Economic Development in the Rural Western United States. *Population and Environment* 24(3): 255-272.

Low, S. 2004. Regional Asset Indicators: Entrepreneurship Breadth and Depth. *The Main Street Economist*, September, 2004. Center for the Study of Rural America, Federal Reserve Bank of Kansas City, Kansas City, MO.

McGranahan, D.A. 1999. Natural Amenities Drive Rural Population Change. U.S. Department of Agriculture, Economic Research Service, Food and Rural Economics Division. Agricultural Economics Report No. 781.

Merrifield, J. 1984. Impact of mitigation in western energy boomtowns. Growth and Change 15(2):23-28.

Morton, P. 1999. The economic benefits of wilderness: theory and practice. Denver University Law Review, 76(2): 465-518.

Morton, P. 2000. Wilderness, the Silent Engine of the West's Economy. The Wilderness Society, Washington, DC.

Morton, P., Weller, C., Thomson, J., Haefele, M., Culver, N. 2004. Drilling in the Rockies: How much and at what cost? Available at: http://www.wilderness.org/Library/Documents/upload/Drilling-in-the-Rocky-Mountains-How-Much-and-at-What-Cost.pdf.

Nelson, P.B. 1999. Quality of Life, Nontraditional Income, and Economic Growth: New Development Opportunities for the Rural West. *Rural Development Perspectives* 14(2): 32-37.

Payne, C., J. M. Bowker, and P. C. Reed. (compilers) 1992. The economic value of wilderness: Proceedings of the conference; 1991 May 8-11; Jackson, WY. Gen. Tech. Rep. SE-78. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 330 pp.

Power, T. 1995. Economic Well-Being and Environmental Protection in the Pacific Northwest: A Consensus Report by Pacific Northwest Economists. University of Montana, Missoula, MT.

Power, T. M. 1996. Lost Landscapes and Failed Economies. Island Press, Covelo, CA.

Rasker, R., B. Alexander, J. van den Noort, and R. Carter. 2004. Public Lands Conservation and Economic Well-Being. The Sonoran Institute, Tucson, AZ. Available at: http://www.sonoran.org/programs/prosperity.html.

Reeder, R. J. and D. M. Brown. 2005. Recreation, Tourism and Rural Well-Being. U.S. Department of Agriculture, Economic Research Service. Economic Research Report Number 7. 38 pp.

Rudzitis, G. 1999. Amenities Increasingly Draw People to the Rural West. *Rural Development Perspectives* 14(3): 9-13.

Rudzitis, G., and H.E. Johansen. 1989. Amenities, Migration, and Nonmetropolitan Regional Development. Report to National Science Foundation. Department of Geography, University of Idaho, Moscow, ID.

Shumway, J.M. and S.M. Otterstrom. 2001. Spatial Patterns of Migration and Income Change in the Mountain West: the Dominance of Service-Based, Amenity-Rich Counties. *Professional Geographer* 53(4): 492-501.

Smith, Edward J. 1986. Boom and bust in energy extraction. Agriculture and Rural Economics Division, Economic Research Service, U.S. Department of Agriculture, Washington, DC. Staff Report No. AGES860423.

Snepenger, D.J., J.D. Johnson, and R. Rasker. 1995. Travel-Stimulated Entrepreneurial Migration. *Journal of Travel Research* 34(1): 40-44

Vias, A. C. 1999. Jobs follow people in the rural Rocky Mountain West. Rural Development Perspectives 14(2): 14-23.

Walsh, R. G. J. B. Loomis, and R. A. Gillman 1984. Valuing Option, Existence, and Bequest Demands for Wilderness. *Land Economics*, 60(1): 14-29.

Whitelaw, E., and E.G. Niemi. 1989. Migration, Economic Growth, and the Quality of Life. In Proceedings of the Twenty-Third Annual Pacific Northwest Regional Economic Conference, Corvallis, OR, pp 36-38.

EXHIBIT 4

SOUTHERN UTAH WILDERNESS ALLIANCE *ET AL.*

COMMENTS AND OBJECTIONS RE: PROPOSED COAL HOLLOW MINE, C/025/0005

0048

ACT/025/005 Incoming
cc: Priscilla Dana Baron

USDA United States Department of Agriculture | Forest Service | Dixie National Forest, Powell Ranger District | 225 East Center Street, P.O. Box 80, Panguitch, UT 84759-0080, 435-676-9300

File Code: 1950-5
Date: May 9, 2008

Ms. Mary Ann Wright
Associate Director, Mining
Coal Regulatory Program
Division of Oil, Gas & Mining
P.O. Box 145801
Salt Lake City, UT 84114-5801

Dear Ms. Wright:

Thank you for the letter informing the Powell Ranger District, Dixie National Forest, that the Utah Division of Oil, Gas and Mining has determined the Alton Coal Development, LLC permit application for the Coal Hollow Mine is administratively complete.

The District understands that "Alton Coal Development intends to conduct surface coal mining on the 635.64-acre tract of land to mine privately held coal leases" and is "located in Kane County, T.39 S, R.5 W, Sections 19, 20, 29, and 30, approximately 3 miles south of Alton on County Rd. #136". This tract of private land is immediately adjacent to a Bureau of Land Management (BLM) tract, which is also under consideration for surface coal mining, and within one mile of National Forest System lands on the Powell Ranger District, Dixie National Forest.

On February 26, 2007, the District/Forest submitted a letter to the Kanab Field Office, BLM, expressing concerns to be addressed in the Alton Coal Tract Lease by Application, Environmental Impact Statement. The concerns expressed to the BLM in the afore mentioned letter also apply to the 635.64 acre tract of privately held coal leases in the Coal Hollow Mine under review by the State of Utah, Division of Oil, Gas and Mining.

The Forest Service asks that this cover letter and an enclosed copy of the February 26, 2007, letter to the BLM be included as comments in the application/permitting process for the Coal Hollow Mine.

Again, thank you for the opportunity to provide comments.

Sincerely,

DONNA L. OWENS
District Ranger
Enclosure
cc S.O.

USDA United States Department of Agriculture | Forest Service | Powell Ranger District Dixie National Forest | 225 East Center Street, P.O. Box 80 Panguitch, Utah 84759-0080 435-676-9300

File Code: 1950-4
Date: February 26, 2007

Mr. Keith Rigtrup
Kanab Field Office
Bureau of Land Management, USDI
318 North 100 East
Kanab, UT 84741

Dear Mr. Rigtrup:

This letter is in response to the request for scoping comments for the proposed *Alton Coal Tract Lease by Application, Environmental Impact Statement* on Bureau of Land Management (BLM) lands managed by the Kanab Field Office.

Thank you for the opportunity to suggest issues and other topics that should be included in the scope of the EIS that is being prepared. The proposed lease application and coal mine presents concern to the Dixie National Forest particularly the Powell Ranger District which is located one mile east of portions of the proposed coal mine. It is imperative the potential impacts to Federal lands and the local region be examined and mitigated to ensure that energy development is conducted in a manner that protects these lands for the public.

Our concerns include air pollution, water pollution, and the loss of scenic vistas, natural quiet, and wildlife habitat. The Forest Service also has concerns as they relate to tourism, highway safety, and the effects this proposal has on Bryce Canyon National Park (BCNP) and BLM lands managed by both the Kanab Field Office and the Grand Staircase-Escalante National Monument (GSENM) which connect through boundaries and through interagency efforts to coordinate services to the public. The Forest Service would like to work closely with staff from the Kanab Field Office as this analysis is developed.

Millions of visitors seek out the campgrounds, scenery, trails and other recreation activities found on the Dixie National Forest and adjacent BCNP, BLM, and GSENM lands. Most of these visitors travel on U.S. Highway 89 to access these areas. The outstanding visual, recreational, and resource values that are found on the Dixie National Forest should be addressed in the EIS and the potential effects to this area if adjacent lands are opened to coal mining.

Tourism represents 60% of the economic base in Garfield County, where visitor expenditures contribute substantially to employment and economic activity of Garfield County. Impacts to the economy of Garfield County should also be addressed in the EIS since coal extraction could adversely impact tourism in the area.

The proposal to extract coal near Alton, Utah, raises many concerns about what impacts these activities would have on the Dixie National Forest and the local region. Specifically there are significant concerns related to the following:

Air Quality: BCNP and nearby Zion and Capitol Reef National Parks are Class I Airsheds under the Clean Air Act, so no significant degradation of air quality should be permitted under the proposed actions in the EIS. The proximity of Alton, Hatch, and other private residential

subdivisions should also be a considered when analyzing the impacts to air quality. In addition to impacts to criteria pollutants, the Forest Service asks that you examine the visibility of dust plumes from haul routes, surface mining, coal preparation, and loadout activities in the impact analysis. The analysis should also address cumulative impacts from the distribution of coal off-site and its use in regionally located, coal fired power plants which could increase air pollution to these Class I Airsheds. The ongoing nature of the mining activity could also impact the public agencies ability to conduct prescribed burns and treat wildland urban interface areas if air quality is degraded to the point of risking compromise to a Class I Airshed.

Night Skies: The Dixie National Forest works closely with BCNP in the interpretation of night sky quality. The Red Canyon Visitor Center conducts popular evening interpretive programs to educate visitors about night sky quality. Night sky quality is principally degraded by light pollution – emissions from outdoor lights that cause direct glare and reduce the contrast of the night sky – but atmospheric clarity also plays a role. The EIS should address the impacts to night sky quality and provide mitigation measures if the night sky quality would be compromised due to round-the-clock mining operations.

Tourism: The impacts of coal development on the tourism industry of the area should be included in the EIS and should include users of National Forest, National Park, and BLM lands and visitors just traveling through the area on highways and scenic byways. During the public meetings it was stated that there would be 153 double trailer coal trucks traveling one way or 306 round trips per day along the proposed route. Please address additional heavy equipment and increased traffic loads on surrounding highways especially U.S. Highways 89, Utah Highway 20, and Interstate 15. U.S. Highway 89 has recently been designated as "The Mormon Pioneer Heritage Highway" and is also the main artery for tourist travel between Bryce Canyon, Zion, and Grand Canyon National Parks. This traffic not only includes cars but larger recreational vehicles. Increased traffic would have a negative impact on both residents, which include employees, and visitors to the area who would not be able to fully appreciate the new designation of this corridor as a result of the increased truck traffic. In addition, the analysis should include how the increased truck traffic would impact the city of Panguitch, which has recently been added to the National Historic Register. Panguitch is also the western gateway to Scenic Byway 12, an All American Road, the highest scenic designation a highway can have. The EIS should address impacts to the nationally designated historic city and adjacent designated areas.

Safety along these highways is always an issue, especially during the high tourist season. The increased truck traffic obviously will increase the safety hazard potential. The EIS should address the safety issues and possible mitigations.

The EIS should also analyze proposed and any potential haul routes, especially if there is a chance that the route may change over the 20 years of operation of the coal mine. If this does not occur during this EIS process, there may be no opportunity to address these issues in the future.

Soundscapes: During the public meetings it was mentioned that there would be no blasting associated with the proposed coal mine. The EIS needs to analyze and demonstrate how mining operations will be conducted so that no blasting would occur especially when needing to remove up to 200 feet of overburden. If there is any potential that blasting could occur during the proposed life of the mining operation (20 years) the EIS should address this potential impact.

Scenic Values: The Paunsaugunt Plateau rises to the east of the proposed coal mine. It is likely that the proposed coal mine would be directly visible from trails, roads, and viewpoints along the Paunsaugunt Plateau. It is also likely that disturbances such as removal of overburden and dust along haul routes could cause dust plumes that may be visible. These dust plumes could also affect the air quality since the prevailing winds come from the south and west. The EIS should address impacts to the scenic values of the U.S. Highway 89 corridor, which is a primary travel route for visitors to the area as discussed under the tourism section.

Water Quality: Several watersheds could potentially be impacted by the proposed coal mine. The potential for water quality degradation from ground disturbing activities within the Robinson Creek and Kanab Creek watersheds should be addressed in the EIS. The potential for water contamination from spills and natural overland flow (rain runoff) should also be addressed. This analysis should include the Sevier watershed along the proposed haul route.

Other Resource Concerns: The EIS should address a number of concerns related to possible impacts to other regional resources and visitor appreciation of the National Forest and surrounding areas. These include wildlife; habitat; sensitive species (surveys for such species should follow established scientific protocol); restoration of the impacted site; and cumulative impacts from other activities (existing truck traffic along the proposed haul routes, logging, proposed oil and gas leasing, residential expansion throughout the region). Many factors (light pollution, dust, noise, traffic) singularly may not degrade the National Forest and regional resources, but cumulatively could be a great impact to these areas and to those visiting the area. Please address what may happen if there is a future need for alternate haul routes, blasting, or expansion of the proposed mine site. In addition, impacts associated with portions of the proposed coal mine occurring on state or private lands should be considered as part of the overall cumulative impacts of the mine.

The Forest Service is very interested in being involved in the EIS process and appreciates the opportunity to provide input into this proposed project and looks forward to working with the Bureau of Land Management cooperatively on this analysis.

Sincerely,

Donna L. Owens

DONNA L. OWENS
District Ranger

cc S.O.
Eddie Lopez, Superintendent, BCNP
Brad Exton, Monument Manager, GSENM
Rusty Lee, GSENM

EXHIBIT 5

SOUTHERN UTAH WILDERNESS ALLIANCE *ET AL.*

COMMENTS AND OBJECTIONS RE: PROPOSED COAL HOLLOW MINE, C/025/0005

0016

From: Carmen Bailey
To: Pam Grubaugh-Littig
Date: 10/30/2007 1:52 PM
Subject: UDWR Alton comment letter
Attachments: Alton signed.pdf

Here is our comment letter on Alton.
Thanks, Carmen

Incoming #
C/055/0005

State of Utah

Department of Natural Resources

MICHAEL R. STYLER
Executive Director

Division of Wildlife Resources

JAMES F. KARPOWITZ
Division Director

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

February 23, 2007

Carolyn Wright
Public Lands Policy Coordination
Office of the Governor
5110 State Office Building
Salt Lake City, Utah 84114-1107

Subject: RDCC #7336 Federal Coal Lease Application Filed by Alton Coal Development LLC

Dear Ms. Wright:

The Utah Division of Wildlife Resources (UDWR) has reviewed the draft of the RMP/EIS for the Kanab Field Office BLM. We provide the following comments:

UDWR has concerns about a greater sage-grouse lek near Alton, the southernmost existing lek rangewide. Based on all existing data, the proposed coal mine would be expected to result in the destruction of this greater sage-grouse lek. To date, there are no documented instances of successful transfers of a lek by way of experimental introductions. From a wildlife standpoint, the lek would appear incompatible with coal mining activity of the type contemplated near Alton, which would involve removal of the overburden where the coal is approximately 30 feet below the surface. Generally, we would suggest mitigation measures to compensate for the loss of wildlife (Example: Mitigation in the form of habitat restoration for loss of elk or mule deer winter range), however, there are no alternatives or reparations known to suitably replace a greater sage-grouse lek.

Another issue of importance concerns the coal dust impact on water quality. Haul trucks, if not properly covered, could produce large quantities of coal dust potentially impacting aquatic life inhabiting Asay, Kanab, and Mammoth creeks, as well as the upper Sevier River. We encountered similar problems along Salina Creek when the SUFCO mine began heavy hauling which resulted in layers of coal dust entering the creek.

Thank you for the opportunity to comment on this draft document. We look forward to working with the Kanab BLM on both RMP and project-specific activities. If you have further questions, please contact Bruce Bonebrake, Habitat Manager, in our Cedar City Office at (435) 865-6112.

Sincerely,

James F. Karpowitz

James F. Karpowitz

JFK/cb

1594 West North Temple, Suite 2110, PO Box 146301, Salt Lake City, UT 84114-6301
telephone (801) 538-4700 • facsimile (801) 538-4709 • TTY (801) 538-7458 • *www.wildlife.utah.gov*

EXHIBIT 6

SOUTHERN UTAH WILDERNESS ALLIANCE *ET AL.*

COMMENTS AND OBJECTIONS RE: PROPOSED COAL HOLLOW MINE, C/025/0005

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 WYNKOOP STREET
DENVER, CO 80202
Phone 800-227-8917
http://www.epa.gov/region08

MAR - 9 2007

Ref: 8EPR-N

Mr. Keith Rigtrup
Bureau of Land Management
Kanab Field Office
318 North 100 East
Kanab, UT 84741

089

Re: Federal Coal Lease Application Filed by Alton Coal Development LLC, near Alton, UT -- Scoping Comments

Dear Mr. Rigtrup:

The U.S. Environmental Protection Agency Region 8 (EPA) has reviewed the Bureau of Land Management's (BLM) notice of intent to prepare an Environmental Impact Statement and initiate scoping for the proposed federal coal lease by application (LBA) fielded by Alton Coal Development for a site near Alton, Utah. Alton Coal Development proposes to construct and operate a surface coal mine to access approximately 46 million tons of in-place federal coal underlying approximately 3,580 acres of public and private land. The proposed LBA, hereafter referred to as the Alton Tract, is located approximately 10 miles west of Bryce Canyon National Park, near Cedar Breaks National Monument and Zion and Capital Reef National Parks. Consistent with our authority under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, we offer the enclosed comments for your consideration as you proceed with the draft Environmental Impact Statement (EIS).

Based on our current understanding of the project and its proximity to Bryce Canyon National Park and other nationally protected areas, EPA's primary concern is protection of regional and local air quality. Class I areas are the most protected, having the least allowable degradation of air quality. The EIS should thoroughly examine potential impacts to visibility, including particulate matter (PM_{10} and $PM_{2.5}$) and regional haze. The draft EIS should also identify all relevant, reasonable mitigation measures for air quality impacts, even if they are outside the jurisdiction of BLM.

With the mine site located less than one mile from the town of Alton, EPA is concerned about the proximity of blasting operations to population centers and recommends the EIS evaluate impacts to local air quality. Particulates and nitrogen dioxide (NO_2) released during blasting and other mining activities can aggravate asthma, irritate airways, and cause coughing and breathing difficulties. The EIS should examine mitigation and monitoring techniques that will be undertaken to minimize exposure to NO_2 and particulates.

As you know, a similar mining project was proposed in the late 1970s that prompted a 1979 petition raising concerns over impacts to air quality, water quality, noise and visual resources from surface mining in such close proximity to Bryce Canyon National Park. At that time, the Secretary of the Department of Interior designated as unsuitable any parcels which would be visible from Bryce Canyon National Park. Although this project is just outside those designated areas, it would involve an intensive coal trucking operation that would be highly visible and audible to visitors of Bryce Canyon National Park and its environs. The EIS should explain how this proposed project will meet the suitability requirements of the Surface Mining Act. Furthermore, EPA recommends the EIS evaluate underground mining as a reasonable alternative to surface mining. Please find attached our detailed comments on air quality concerns, and other issues that should be addressed in the EIS.

If you have any questions concerning our comments, please contact Jody Ostendorf at 303-312-7814. Please also note that the EPA Region 8 office has recently moved to a new downtown Denver location. Our new mailing address is: U.S. EPA Region 8, 1595 Wynkoop Street, Denver, CO 80202.

Sincerely,

Larry Svoboda
Director, NEPA Program
Ecosystems Protection and Remediation

Enclosure

Detailed Scoping Comments by the Region 8 Environmental Protection Agency for the Proposed Environmental Impact Statement Federal Coal Lease Application Fielded by Alton Coal Development LLC

033

Air Quality

The Draft Environmental Impact Statement (DEIS) for the project should include an air quality analysis and disclose all possible air quality impacts. The air quality assessment should document current air quality conditions, using data sets from ambient air monitoring programs in the vicinity. The assessment should consider the direct impact of all categories of emissions that will occur from the project itself as well as the cumulative impact of other reasonably foreseeable development in the area.

The air quality assessment should involve dispersion modeling. Consistent with guidance from the Federal Leadership Forum, EPA encourages BLM to establish a stakeholders group with air quality expertise to represent affected agencies. The stakeholders group could help BLM to develop a modeling protocol based on estimates of the emissions that are likely to occur from operating the mine and hauling coal. We recommend that BLM compare concentrations predicted by the dispersion modeling to the National Ambient Air Quality Standards (NAAQS) and, for screening purposes, to the Class I and Class II increments under Prevention of Significant Deterioration regulations. The DEIS should also address potential visibility impacts at the Bryce Canyon Class I area and levels of concern for deposition.

We suggest that BLM give special attention to emissions of particulate matter including PM_{10}. In a dry climate such as that of the Kanab Planning Area, mining can emit significant amounts of particulate matter. These emissions can worsen under drought conditions. The air quality assessment should evaluate PM_{10} emissions from the proposed action and any alternatives.

The cumulative air quality analysis should take into account the combined, incremental effect of human-caused air emissions in the area. We recommend that the cumulative air quality analysis include an evaluation of the current and projected future PM_{10} emissions near the study area. The analysis should evaluate cumulative particulate emissions from soil surfaces disturbed by such activities as coal mining; development of other leasable, locatable, or saleable minerals; off-highway vehicle use; and transportation and access.

Dust particulates from construction, vehicle travel on unpaved roads, and ongoing operations are an important concern. The airborne dust may not only be a visual nuisance, but can potentially be dangerous to asthma sufferers. Sedimentation from storm water run-off can also severely impact the aquatic environment. Construction techniques such as 95 percent base compaction prior to placement of gravel, culverts for water drainage, steep slope construction measure to prevent erosion, and appropriate dust control methods (such as watering or placement of a non-chlorine based dust abatement chemical treatment), are proven dust suppression

techniques. The EIS should detail plans for addressing dust control for the project, including: dust suppression methods, inspection schedules, documentation and accountability processes.

Cultural Resources

The Surface Mining Law prohibits mining in areas which will adversely affect sites listed on the National Register of Historic Places; and within a restricted distance of occupied dwellings, public roads, etc. The proposed mine site is reportedly within ½ mile of occupied homes in Alton. The route for trucking the coal involves using Highway 89, which was declared a Mormon Pioneer Heritage Highway in October, 2006. Furthermore, the proposed haul route goes through the towns of Hatch and Panguitch, which was placed on the National Register of Historic Places in November, 2006. The DEIS must disclose how the proposed project will meet federal laws that require, whenever possible, preservation of important historic, archaeological, and cultural aspects of our national heritage.

Alternatives

As proposed, the project involves trucking coal 115 miles from the mine site to Cedar City with 153 trucks per day each way, up to 306 trucks over a 24-hour period. Trucks would depart the mine every 9.5 minutes, 24 hours per day, six days a week. The EIS should discuss how this increased truck traffic will impact local communities and their tourism and recreation economy. As stated above, the Surface Mining Law prohibits mining in areas which will adversely affect sites listed on the National Register of Historic Places; and within a restricted distance of occupied dwellings, public roads, etc. EPA recommends the EIS explore a range of alternatives for transporting the coal from the mine, including rail.

Nitrogen Oxide

If blasting is to be conducted at the proposed coal mine, the EIS should discuss and commit to a mitigation strategy that addresses short-term exposure to nitrogen dioxide (NO_2). Mitigation actions that should be considered include: closure of roads during blasting to avoid hazardous concentrations of NO_2 on public roads; the use of low NO_2 blasting techniques (bore hole liners, improved blasting agents/additives, etc.); limiting the blast size to 50,000 pounds or less; and only allowing blasting to occur during daylight hours when wind and atmospheric conditions are favorable for adequately dispersing air pollutants (i.e. not blasting when inversions exist). In addition, all public access should be restricted at the time of the blast to within a safe setback distance. These mitigation measures are especially important given the proximity of the proposed mine to residences. EPA recommends an alternative that controls NO_2 so that all toxic releases remain at or below safe levels on areas of public access.

Carbon Dioxide and Mercury Emissions

The DEIS should clarify the anticipated rates at which the Alton mine will produce coal under the proposed action and any alternatives. If the actual rate of production were to increase in the future, then coal combustion could also increase. The DEIS should disclose how an increase

in coal combustion and new emissions of carbon dioxide (CO_2) would contribute to global climate change.

The DEIS should also disclose that emissions from coal combustion have been identified as a significant source of atmospheric mercury. Concentrations of mercury emitted through combustion vary depending on the chemistry of coal deposits and the type of air pollution controls. For purposes of the DEIS, we recommend including existing information on mercury emissions from power plants that would burn coal from the Alton mine.

Noise

Please analyze the noise associated with blasting, coal transportation, and other mining activities under the Noise Control Act and Quiet Communities Act. The Noise Control Act declares that it is a national policy to promote an environment free from noise that jeopardizes the health or welfare of Americans. Considering the proposed project's proximity to Bryce Canyon National Park and other important landscape treasures, the EIS should discuss how natural soundscapes will be protected to reduce impacts to adjacent communities, transportation corridors, national forest, and national parks.

Threatened and Endangered Species

EPA recommends that BLM engage the Fish and Wildlife Service early in the analysis to ensure BLM meets its responsibilities under the Endangered Species Act (ESA). Section 7 of the ESA directs all Federal agencies to use their existing authorities to conserve threatened and endangered species and, in consultation with the Service, to ensure that their actions do not jeopardize listed species or destroy or adversely modify critical habitat.

Ground and Surface Water Protection

The EIS should clearly describe and analyze potential water quality impacts to both groundwater and surface water from the proposed mining activities. The interaction between groundwater and surface water should also be evaluated. If mining activities, including transportation of coal, will alter seasonal water levels and/or water quality in nearby streams, the DEIS should include an analysis of impacts to resident fish species and invertebrates, stream morphology and sediment flow, including an identification of mitigation measures for adverse impacts.

Protecting wetlands and riparian areas

EPA considers the protection, improvement, and restoration of wetlands to be a high priority. Wetlands increase landscape and species diversity, and are critical to the protection of designated water uses. Possible impacts on wetlands include damage or improvement to: water quality, habitat for aquatic and terrestrial life, channel and bank stability, flood storage, ground water recharge and discharge, recreation and aesthetics. Land clearing and earth work generally include sedimentation and hydrologic impacts which may cause changes to surface and

subsurface drainage patterns and, ultimately, wetland integrity and function.

Executive Order 11990 directs all federal agencies to provide leadership and take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands. Indirect draining of, or direct disturbance of, wetland areas should be avoided if at all possible. If there may be wetlands in the project area, EPA recommends consultation with the U.S. Army Corps of Engineers to determine whether any of the project activities require a Clean Water Act (CWA) Section 404 permit. Studies indicate that traditional mitigation is generally not successful in fully restoring wetland function. If disturbance is unavoidable, EPA suggests that BLM require a two-to-one mitigation of wetland disturbance. Due to the time it can take to adequately reclaim disturbed wetlands and the potential life of this project, BLM may consider requiring mitigation to begin concurrent with the disturbance. EPA also suggests that BLM require complete avoidance of disturbance to any fen wetland (a Category 1 resource).

Cumulative Impacts

The EIS should include a comprehensive examination of the cumulative impacts of building and operating a surface coal mine in this area. The environmental impacts of blasting, transportation, coal production and combustion, and ancillary operations, etc. that are constructed for this project must be considered and evaluated in the EIS. Further, the assessment should include analysis of the cumulative impacts of energy-related activities, other reasonably foreseeable development (ie. the proposal for oil and gas leasing on the Dixie National Forest, coal-bed methane development), and any other activities that may affect air and water quality in the area. The impacts should be analyzed according to airsheds and watersheds, rather than political, state or ownership boundaries.

EXHIBIT 7

SOUTHERN UTAH WILDERNESS ALLIANCE *ET AL.*

COMMENTS AND OBJECTIONS RE: PROPOSED COAL HOLLOW MINE, C/025/0005

United States Department of the Interior
NATIONAL PARK SERVICE
BRYCE CANYON NATIONAL PARK
Highway 63 Bryce #1
PO Box 170001
Bryce Canyon, UT 84717

L2427 (1330)

February 23, 2007

Keith Rigtrup
BLM Kanab Field Office
318 North 100 East
Kanab, Utah 84741

Dear Mr. Rigtrup:

This letter is in response to the request for scoping comments for the proposed *The Alton Coal Tract Lease by Application, Environmental Impact Statement,* on Bureau of Land Management (BLM) lands that are managed by the Kanab Field Office.

We are pleased to have this opportunity to suggest issues and other topics that should be included in the scope of the EIS that is being prepared. In the past, proposed coal mining on BLM lands in proximity of Bryce Canyon National Park (BRCA) has been of concern, including a past proposal to mine the Alton coal deposits. The newly proposed Alton Coal mine is no exception. It is imperative that the potential impacts to federal lands and the local region be examined and mitigated to ensure that energy development is conducted in a manner that protects these lands for the public. In addition, the special protection afforded under the Surface Mining Control and Reclamation Act of 1977 to BRCA, as a unit of the National Park System, needs to be accounted for in the EIS.

As directed by the Organic Act (16 USC 1 et seq. Organic Act), Redwoods National Park Act (16 USC 79a-79q), and National Park Service Policy (2006), national parks are responsible for responding to any proposals and changes to adjacent lands that may impact the park's resources such as, but not limited to air pollution, water pollution, the loss of scenic vistas, natural quiet, and wildlife habitat. As part of our efforts to minimize impacts to resources in the parks, we would like to work closely with staff from the Kanab Field Office as this analysis is developed.

Bryce Canyon National Park was established, in part, for its "unusual scenic beauty," and the authorities establishing and enlarging the park explicitly mandate the preservation of these scenic resources. The park receives 1.5 million visitors annually, most of whom travel on Highway 89 either coming to or from the park. The park has outstanding visual, recreational, and resource values that may be severely compromised if adjacent lands are opened to coal mining. Bryce Canyon National Park is the main visitor attraction to Garfield County, where tourism represents 60% of the economic base. As such, visitor expenditures contribute substantially to employment and economic

activity of Garfield County. We believe that activities such as coal extraction could adversely impact the park's resources and visitors, and potentially diminish tourism in the area.

The proposal to extract coal near Alton, Utah, raises many concerns about what impacts these activities would have on both BRCA and the local region. Specifically there are significant concerns related to the following:

Air Quality. Bryce Canyon and nearby Zion and Capitol Reef National Parks are Class I areas under the Clean Air Act, so no significant degradation of air quality should be permitted under the proposed actions in the EIS. In addition to impacts to criteria pollutants, we ask that you examine the visibility of dust plumes from haul roads, surface mining, coal preparation, and loadout activities in the impact analysis. The analysis should also address cumulative impacts from the distribution of coal off-site and its use in regionally located, coal fired power plants which could increase air pollution to these Class I air sheds.

Night Skies. *Existing Condition*: Bryce Canyon National Park lies on the western edge of the Colorado Plateau, one of the last areas of natural night skies one can view in the contiguous US. In an expanding survey of 45 park units, Bryce Canyon ranks in the top five in night sky quality. Night sky quality is principally degraded by light pollution — emissions from outdoor lights that cause direct glare and reduce the contrast of the night sky — but atmospheric clarity also plays a role.

The combination of clear air (free of aerosols and water vapor that reduce visibility), high elevation, and a sparse human population in the immediate vicinity of the park results in a view of the night sky that is near pristine as well as vulnerable. Photometric measurements taken within the park show that zenith sky condition is virtually unaltered, attaining the theoretical natural darkness of 21.95 magnitudes per square arc-second at Yovimpa Point (the darkest location in the park). The park has collected precise data on night sky brightness and existing light pollution from Yovimpa Point in the south portion of the park, as well as Bryce Point and Inspiration Point in the northern portion. Data collected at Cedar Breaks and Zion compliment the Bryce Canyon data.

The night skies of Bryce Canyon are a popular attribute of the park, sought by thousands of park visitors each year. Ranger-led stargazing programs are extremely well attended, and the park is known nationwide for this aspect.

Potential Threats: Potential impacts to night sky quality from the originally proposed Alton Coal Mine were previously analyzed in 1989. That report found a possible substantial impact to the park, especially to the area around Yovimpa Point. The degree of impact is highly dependent on the combined brightness of the facility lights at the Alton Coal Mine, the amount of airborne particulates generated by mine and mine-related activities, and what mitigation measures are applied. The impact could potentially extend to the northern portions of the park and substantially change the character of the nighttime environment at Yovimpa Point and other key viewpoints. Concerns also extend to the nocturnal wildlife of the park that depends on darkness.

The National Park Service is interested in working with the Alton Coal Mine planning effort and assisting in getting the most value from mitigation efforts. We are optimistic that the adverse effects of outdoor lighting can be sharply reduced. The park is able to provide technical assistance on lighting selection and modeling of night sky impacts, and we look forward to working with

neighboring communities and businesses to protect this valuable resource and in sharing it with the American public.

Tourism. The impacts of coal development on the tourism industry of the area should be included in the impact analysis and should include users of National Park System units and National Forests, and visitors traveling through the area on highways and scenic byways. During the public meetings it was stated that there would 153 double-trailer coal trucks traveling one-way or 306 round trips per day along the proposed route. Please address additional heavy equipment and increased traffic loads on surrounding highways especially Highways 89, 20, and 15. Highway 89 has recently been designated as "The Mormon Pioneer Heritage Highway" and is also the main artery for tourist to travel between Bryce Canyon and Zion National Parks and the Grand Canyon National Park. This traffic not only includes cars but larger Recreational Vehicles. Increased traffic would have a negative impact on both residents, which include park employees, and visitors to the area who would not be able to fully appreciate the new designation of this corridor as a result of the increased truck traffic. In addition, the analysis should include how the increased truck traffic would impact the city of Panguitch, which has recently been nominated to the National Historic Register.

The EIS should also analyze proposed and any potential haul routes, especially if there is a chance that the route may change over the 20 years of operation of the coal mine. If this does not occur during this EIS process, there may be no opportunity to address this issue in the future.

Soundscapes: During the public meetings it was mentioned that there would be no blasting associated with the proposed coal mine. The EIS needs to analyze and demonstrate how mining operations will be conducted so that no blasting would occur especially when needing to remove up to 200 feet of overburden. If there is any potential that blasting could occur during the proposed life of the mining operation, (20 years), the EIS should address this potential impact. In the 1980's staff from Bryce Canyon documented hearing explosions in the Yovimpa Point area of the park. These explosions were also measured on noise monitoring equipment in the same vicinity. After investigation it was determined that explosions heard came from oil and gas exploration on the Dixie National Forest in the Mount Dutton area. Based on conversations with the Federal Aviation Authority, the distance from the exploration sites to the Yovimpa Point area is 35-38 air miles. This is a significantly greater distance than the 10 miles between the proposed coal mine and the park boundary. This memorandum is on file in the park and available for review. Noise from mining equipment should also be analyzed; it is possible under the right conditions that operations could be heard in the park if loud enough. Sound impacts related to haul truck traffic in the vicinity of the park should also be included in this portion of the analysis.

Scenic Values. BRCA rises above surrounding terrain. It is unlikely that the proposed coal mine would be directly visible from the park due to the terrain between the park and the proposed site. It is likely though that disturbances (removal of overburden and dirt haul roads) that cause dust plumes may be visible. These dust plumes could also affect the day and night visibilities from Bryce Canyon since the prevailing winds come from the south and west. The EIS should address impacts to the scenic values of the Highway 89 corridor, which is a primary travel route for visitors to the area as discussed under the tourism section.

Water Quality. Although the watershed directly associated with BRCA should not be affected by the proposed coal mine, concerns for water quality arise from ground disturbing activities within the Robinson Creek and Kanab Creek watersheds within the boundaries of the proposed mine. Waters

from these creeks eventually reach the Colorado River within Grand Canyon National Park. The potential for water contamination from spills and natural overland flow (rain runoff) should also be addressed. This analysis should include the Sevier watershed along the proposed haul route.

Other Resource Concerns. The EIS should address a number of concerns related to possible impacts to other regional resources and visitor appreciation of the parks and surrounding area. These include wildlife; habitat; sensitive species (surveys for such species should be done multiple years and during times when species are most likely to be present); restoration of the impacted site; and cumulative impacts from other activities (existing truck traffic along the proposed haul routes, logging, proposed oil and gas leasing, residential expansion throughout the region). Many factors (light pollution, dust, noise, traffic) singly may not degrade the park and regional resources, but cumulatively could greatly impact the visitors to BRCA. Please address what may happen if there is a future need for alternate haul routes, blasting, or expansion of the proposed mine site. In addition, impacts associated with portions of the proposed coal mine occurring on state or private lands should be considered as part of the overall cumulative impacts of the mine.

We are very interested in being involved in the EIS process in order to help protect National Park values. We appreciate the opportunity to provide input into this proposed project and look forward to working with the Bureau of Land Management cooperatively on this analysis. Please contact Kristin Legg, Chief of Resource Management, at 435-834-4900 or Kristin_legg@nps.gov to arrange a time to discuss our concerns.

Sincerely,

/s/

Eddie L. Lopez
Superintendent
Bryce Canyon National Park

cc: Deputy Director, Intermountain Region, National Park Service
Cordell Roy, NPS Utah State Coordinator
Supervisor, Dixie National Forest
Donna Owens, District Ranger, Powell Ranger District
Carol McCoy, Geologic Resources Division, NPS
Kerry Moss, Geologic Resource Division, NPS
Mr. Brian Thiriot, Southern Utah Area Coordinator, Office of Senator Bob Bennett
Mr. Michael Empey, Office of Congressman James Matheson
Mr. Maloy Dodds, Garfield County Commission
Mr. Claire Ramsey, Garfield County Commission
Mr. Lowell Mecham, Mayor, Tropic, Utah
Mr. Brian Bremner, Liaison, Garfield County, Utah
Manager, Grand Staircase/Escalante National Monument

EXHIBIT 8

SOUTHERN UTAH WILDERNESS ALLIANCE *ET AL.*

COMMENTS AND OBJECTIONS RE: PROPOSED COAL HOLLOW MINE, C/025/0005

southern
utah
wilderness
alliance

February 26, 2007

Keith Rigtrup,
Planning Coordinator – BLM Kanab Field Office
318 N. 100 E.
Kanab, UT 84741

Re: *Alton Coal Development LLC Federal Coal Lease Application, Scoping Comments*

Greetings:

The Southern Utah Wilderness Alliance appreciates the opportunity to submit the following scoping comments regarding the Alton Coal Development LLC Federal Lease Application. (Alton Coal Lease). We submit these comments on our behalf, as well as on behalf of the Natural Resources Defense Council, The Wilderness Society and our hundreds of thousands of members (referred to herein collectively as "SUWA"). SUWA members regularly visit, use and enjoy Utah's spectacular public lands and waters including those in the Paunsagaunt Plateau and are intensely interested in highly controversial public lands issues such as the development of the proposed Coal Hollow mine near sensitive lands like Bryce National Park. SUWA members also live in Garfield and Kane Counties and thus have a direct stake in maintaining the high quality of life that they currently enjoy in these rural counties.

The proposed lease and strip mine raise significant issues related, but not limited to, the following: air quality, impacts to Bryce Canyon National Park (including to air quality, night skies, visibility), water quality and quantity; wildlife and wildlife habitat, alluvial valleys; traffic and safety on coal haul roads (including Highway 89); and, socio-economic impacts to local communities and businesses. We raise the following specific issues of concern for your review, and look forward to having these issues addressed in the Draft EIS.

Purpose and Need

The BLM cannot narrowly define the project's purpose and need to conclude that only an alternative which allows for maximum development – which will result in significant environmental and natural resources damage – is reasonable. See Davis v. Mineta, 302 F.3d 1104, 1119 (10th Cir. 2002) (agency cannot "define the project so narrowly that it foreclose[s] a reasonable consideration of alternatives") (citations omitted). Here, the purpose and need of the project proponent can be met without authorizing full development; indeed Alton Coal Development, LLC has acknowledged that it will likely proceed with development of the adjacent private surface/private mineral strip mine regardless of the outcome of this EIS and even if Alton Coal Development is not the high bidder on a future coal lease.

Alternatives

NEPA requires federal agencies to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(E). NEPA's implementing regulations explain that the alternatives analysis "is the heart of the environmental impact statement." 40 C.F.R. § 1502.14. See 40 C.F.R. § 1502.14(a) (BLM must "[r]igorously explore and objectively evaluate all reasonable alternatives.).

While an agency may not "completely ignor[e] a private applicant's objectives" in evaluating the reasonableness of alternatives, neither may it let these objectives control its consideration of alternatives. Colorado Environmental Coalition v. Dombeck, 185 F.3d 1167,1174-75 (10th Cir. 1999) (citations omitted), On the contrary, "the evaluation of alternatives mandated by [the National Environmental Policy Act] is to be an evaluation of alternative means to accomplish the general goals of an action; it is not an evaluation of the alternative means by which a particular applicant can reach his goals." Id. at 1174 (citations omitted). A reasonable alternative is one that is "non-speculative . . . and bounded by some notion of feasibility." Utahns for Better Transp. v. U.S. Dep't of Transp., 305 F.3d 1165, 1172 (10th Cir. 2002) (citing Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, 435 U.S. 519, 551 (1978)) (additional citations omitted).

SUWA requests that the BLM, at a minimum, fully analyze and consider the following reasonable, feasible and non-speculative alternative to the proposed action:

- An alternative to the proposed action that would delay offering this tract for lease until the Kanab field office completes its resource management plan revision. By waiting until this process concludes, BLM will make sure that a decision to lease does not foreclose the option of designating this area unsuitable to surface coal mining in the land use planning process, or some other potential protective management regime for any number of resources, including but not limited to wildlife and visual resources.

Independent Review of Third Party Applicant Prepared EIS

The BLM's EIS website states that SWCA – a third party consultant hired by Alton Coal Development, LLC – will prepare the EIS. NEPA's implementing regulations require that BLM "independently evaluate" the environmental information provided by contractors such as SWCA. See 40 C.F.R. § 1506.5(a). This independent evaluation must be documented in the administrative record. If BLM lacks the technical expertise to conduct any part of this review (i.e., impacts to air quality, night skies, and the socio-economics of local communities) then an independent third-party contractor must be obtained by BLM to provide the required analysis.

Direct and Indirect Impacts

NEPA mandates that the BLM describe the direct and indirect and cumulative impacts of federal actions. See 40 C.F.R. § 1508.25(c). Agencies must take a "hard look" at the potential environmental impacts of their proposed actions and disseminate the conclusions of its analyses to the public. See, e.g., Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989) (citing Kleppe v. Sierra Club, 427 U.S. 390, 410 n.21 (1976)).

NEPA's implementing regulations define indirect effects as those that are:

> caused by the action and are later in time or farther removed in distance, but are still reasonable foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

40 C.F.R. § 1508.8. BLM must analyze the project's indirect effects on the resources in the project area. Airport Neighbors Alliance, Inc. v. United States, 90 F.3d 426, 432-33 (10th Cir. 1996). In order to satisfy its duties under NEPA, BLM must undertake a "reasonable, good faith, objective presentation of [indirect] impacts sufficient to foster public participation and informed decision making." Colorado Envtl. Coalition v. Dombeck, 185 F.3d, 1162, 1177 (10th Cir. 1999).

i. Air Quality

SUWA is concerned that the proposed project will impact air quality within the Bryce Canyon airshed as well as other southern Utah national parks. As you know, Bryce Canyon Park is a class I attainment area under the Prevention of Significant Deterioration (PSD) increment system of the Clean Air Act Amendments of 1977, which means that very little deterioration of its ambient air quality is allowed. Petition to Designate Certain Federal Lands in Southern Utah Unsuitable for Surface Coal Mining Operations Statement of Reasons, 10, (1981) (hereinafter Statement of Reasons). BLM must evaluate the direct, indirect, and cumulative impacts the proposed project will have on air quality. When responding to a petition filed by the Sierra Club and others seeking to have certain areas declared unsuitable for coal mining in 1981, the Secretary of Interior found that surface coal mining operations in part of the petition area would not significantly impact the air quality of Bryce National Park. However, this determination was based on information that is now over 25 years old. In the intervening years, air quality in and around Bryce Canyon National Park and other southern Utah national parks has been impacted by development, and other human activities. BLM must revisit the issue of air quality before leasing and development are authorized. In 2005 the National Parks Conservation Association found that "Bryce Canyon's air quality is generally considered to be excellent, but proposed regional power plants, coal extraction, and potential oil and gas production on adjacent land could detrimentally affect air quality in the future." National Parks Conservation Association State of the Parks Report on the Natural Resources of Bryce Canyon National Park, available at http://www.evergreenassoc.com/pdfs/State_of_the_Parks_Bryce.pdf.

ii. Noise

The natural soundscape of Bryce National Park has already been heavily impacted. "A 1995 Study showed that aircraft could be heard at Fairyland Overlook, a popular tourist spot, 29% of the time, and that aircraft could be heard throughout the Park 19% of the time. National Parks Conservation Association State of the Parks Report on the Natural Resources of Bryce Canyon National Park, available at http://www.evergreenassoc.com/pdfs/State_of_the_Parks_Bryce.pdf at 12. The proposed project would significantly increase traffic and associated noise around the Park. Further, the machinery and general operations of the mining project will result in additional noise pollution. The draft EIS should evaluate how additional traffic and other noise associated with the proposed project when combined with existing noise will impact natural soundscapes in the Park and on surrounding communities, such as Alton, Hatch, and Panguitch.

iii. Visibility

The draft EIS must analyze how the proposed project will impact visibility in and around Bryce Canyon as well as other southern Utah national park service units (including Capitol Reef, Canyonlands and Arches). Specifically, will the mine and coal hauling result in dust plumes? Will these plumes be visible from the parks? Will the project result in obstructed viewsheds from the parks? How will this impact the experience of park visitors? Will increased ozone levels be increased and how will this effect visibility?

iv. Water Quality

The goal of the Clean Water Act (CWA) is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." To this end, the CWA requires federal agencies to comply with state water quality standards. 33 U.S.C. §§ 1323, 1313. Moreover, FLPMA requires land use plans to provide for compliance with applicable pollution control laws, including state water quality standards. 43 U.S.C. § 1712 (c)(8). Thus, conformance with the land use plan requires adherence to state water quality standards.

In 1987, Section 319 was added to the CWA to provide additional emphasis on preventing and correcting nonpoint source pollution problems. In response, the State of Utah has incorporated narrative biological criteria into its state water quality standards which state that:

> [I]t shall be unlawful . . . to discharge or place any waste or other substance in such a way as will be or may become offensive such as unnatural deposits . . . or cause conditions which produce undesirable aquatic life . . . or result in concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life . . . .

Utah Admin. Code R317-2-7.2 (narrative standards).

The BLM should identify any and all rivers and tributaries within the project area that are either category 1 or that are on the 303(d) list. Further, the BLM must provide a careful analysis of how the proposed project will impact these water bodies when taken in conjunction with other

past, present, and reasonably foreseeable actions. Further, SUWA is particularly concerned about the impacts of the proposed project on water quality to the Virgin River watershed and the related Navajo Sandstone aquifer. The agency should provide a detailed map and information about road development and proximity to perennial or intermittent streams. The BLM must ensure that the project complies with Utah's numeric and narrative water quality standards, Utah's anti-degradation regulations, and the requirement to implement best management practices for non-point sources of pollution.

v. Wildlife/Fish

How will the proposed project impact wildlife? In particular, how will the proposed project impact sage grouse habitat and big game habitat on the Paunsagaunt Plateau? How much wildlife habitat will be lost due to the presence of mining operations? Will the proposed mining operation impact migration corridors, or impact water resources important to wildlife and fish? Will the proposed project impact known or potential sage grouse habitat?

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The BLM is instructed to implement management plans that conserve sensitive species and their habitat and should not authorize any action that might contribute to the need to list the species under the Endangered Species Act. See BLM Manual 6840.06(C)-(D). See also Wyoming Outdoor Council, 159 IBLA 388 (2003) (stating that BLM must comply with the Manual, specifically Section 6840.06, and that a violation of this section normally requires that an agency decision be set aside). The sage grouse is listed as a sensitive species by the State of Utah. Division of Wildlife Resources, Utah's State Listed Species by County 12 (Oct. 20, 2006), http://dwrcdc.nr.utah.gov/ucdc/ViewReports/sscounty_20061020.pdf.

vi. Transportation/Roads

The proposed project would result in up to 150 coal haul truck round-trips per day from Alton to Cedar City. The DEIS must assess how this increased road traffic will impact communities like Alton, Hatch, and Panguitch, particularly in regards to air quality, noise, and traffic safety. Will the resulting traffic noise be audible in the Park? How will traffic impacts affect Panguitch's historic Main Street and Highway 89's "Heritage Highway" status. Further, the DEIS should analyze whether the proposed project will result in a need to expand existing infrastructure? If so, by how much? and at what cost?

vii. Socioeconomics

The BLM must fully assess the impacts of the proposed action to the socioeconomics of local communities and businesses in towns like Panguitch and Hatch that rely on tourism for their livelihoods. Impacts from truck traffic, coal dust, noise, and loss of air quality to these communities and their businesses must be considered, analyzed, and disclosed.

viii. National Historic District/Heritage Highway

The BLM must fully assess the impacts of the proposed action to the town of Panguitch's historic main street – recently placed on the National Historic Register, as well as to Highway

89's status as a "Heritage Highway." Is using Highway 89 as a coal haul road consistent with these special designations? Will using Highway 89 as a coal haul road adversely affect the National Historic District? If so, how? Can these impacts be mitigated? Will using Highway 89 as a coal haul road adversely affect Highway 89's Heritage Highway status? If so, how? Will the historical, architectural and cultural values showcase in the "Mormon Pioneer Heritage Area Bill" be adversely impacted by coal mine related activities? If so, how?

ix. Recreation

The proposed project area (and areas that will be visible from the project area) and coal haul road provides numerous recreation opportunities, for outdoor enthusiasts, including biking on Highway 89 and hunting in the Paunsagaunt Plateau. The BLM must consider the significant impacts the proposed project will have on primitive recreation, hunting and tourism and on the scenic quality of the area.

x. Global Warming

SUWA expects that BLM will fully analyze and give considerable treatment and attention to the impact that mining, transporting, and burning the coal from this lease will have with regards to global warming and the efforts by Governor Huntsman's administration to reduce the state's greenhouse gas footprint.

Cumulative Impacts

The cumulative impacts discussion must evaluate, analyze, and disclose the impacts of the proposed action and alternatives "when added to these and other past, present, and reasonably foreseeable future actions." 40 C.F.R. § 1508.7 (emphasis added). The Council on Environmental Quality has recognized that "the most devastating environmental effects may result not from the direct effects of a particular action, but from the combination of individual minor effects of multiple actions over time." CEQ, Considering Cumulative Effects Under The National Environmental Policy Act (1997). As the D.C. Circuit has explained, "[a] meaningful cumulative impact analysis must identify (1) the area in which the effects of the proposed project will be felt; (2) the impacts that are expected in that area from the proposed project; (3) other actions – past, present, and proposed, and reasonably foreseeable – that have had or are expected to have impacts in the same area; (4) the impacts or expected impacts from these other actions; and (5) the overall impact that can be expected if the individual impacts are allowed to accumulate." Grand Canyon Trust v. Federal Aviation Admin, 290 F.3d 339, 345-47 (D.C. Cir. 2002). Furthermore, NEPA requires that BLM's cumulative impacts analysis provide "some quantified or detailed information," because "[w]ithout such information, neither courts nor the public . . . can be assured that the [agency] provided the hard look that it is required to provide." Neighbors of Cuddy Mountain v. United States Forest Service, 137 F.3d 1372, 1379 (9th Cir. 1998) (emphasis added).

"[G]eneral statements about 'possible' effects and 'some risk' do not constitute a 'hard look' absent an explanation of why more definitive information could not be provided." See Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208, 1214 (9th Cir. 1998). SUWA and

its members expect that the BLM will go the extra mile to ensure that all known or reasonably foreseeable indirect effects and cumulative impacts will be analyze, evaluated, and disclosed to the public.

SUWA is particularly concerned about the cumulative impacts of the proposed project in conjunction with the proposed private surface/private mineral Coal Hollow mine, potential coal bed methane development in Kane County, current and proposed coal burning power plants to a host of resources, including air quality, night skies, and visibility.

Thank you for your time and consideration in reviewing these scoping comments. Please place Southern Utah Wilderness Alliance on your mailing list to receive a print and CD copy of the draft environmental impact statement, as well as print copies of all other notification regarding this proposed action. Please send these items to the following address: Stephen Bloch, Southern Utah Wilderness Alliance, 425 East 100 South, Salt Lake City, Utah 84111.

Sincerely,

/s/ Stephen Bloch

Stephen Bloch
Staff Attorney